THE METAMORPHOSIS OF THE IMF (2009-2011)

2013

Pablo Moreno

Estudios económicos
N.º 78

BANCO DE **ESPAÑA**
Eurosistema

THE METAMORPHOSIS OF THE IMF (2009-2011)

El Banco de España, al publicar esta serie, pretende facilitar la difusión de estudios de interés que contribuyan al mejor conocimiento de la economía española.

Los análisis, opiniones y conclusiones de estas investigaciones representan las ideas de los autores, con las que no necesariamente coincide el Banco de España.

El Banco de España difunde todos sus informes y publicaciones periódicas a través de la red Internet en la dirección http://www.bde.es.

ISSN: 1579-8712 (edición electrónica)

THE METAMORPHOSIS OF THE IMF (2009-2011)

Pablo Moreno

Estudios Económicos, n.º 78
2013

Abstract[1]

In response to the global financial crisis, the G20 launched a series of far-reaching initiatives laying the foundations of a New International Economic Order (NIEO) based on three main elements: the configuration of the G20 as the forum for economic coordination (replacing the G7), the strengthening of the institutional pillars of the Bretton Woods system – the International Monetary Fund (IMF or Fund), the World Bank Group, and the World Trade Organization –, and the establishment of a new pillar of financial regulation and supervision, the Financial Stability Board.

The purpose of this work is to analyze the transformation of the Fund between 2009 and 2011 in response to the global financial crisis. This analysis shows that there have been very substantial changes in all of its major fronts – governance and institutional culture, surveillance and lending policies, and resources – which represent the beginning of a metamorphosis in the operations and functions of the Fund that introduce new challenges and will determine its future role.

Chapter 1 addresses the main changes in the NIEO. Chapter 2 looks at the evolution of the Fund's lending and resources policies, which insert the post 2009 reforms in their historical perspective. Chapter 3 deals with the insurance and financing mechanisms developed as a response to the global financial crisis, the so-called Global Financial Safety Nets, including the new insurance function of the Fund. Chapter 4 analyses the changes in IMF governance, and Chapter 5 the post-2009 IMF lending policy. The final notes wrap up the previous chapters and summarize the challenges ahead for the IMF.

1 This work translates and briefly updates the book published by the author in Spanish: *La Metamorfosis del FMI (2009-2011),* edited by Thomson Reuters-Civitas, Madrid (2012). Disclaimer: the Spanish version of the book was closed in December 2011 (with a few 2012 updates); while there is some new information with policy measures undertaken in 2012 and 2013, this English version is not fully updated. The absence of updates is particularly relevant in Chapter 1 of a more conjuncture nature. Disclaimer and apology: the translation procedure is doubly contaminated: (i) from the use of internet automatic translators, resulting in a mixed writing style; and (ii) from the unpleasant and difficult cycle of re-reading oneself "lost in the translation" of working first, with most of the original references in English; and now, going back from the Spanish text into English. Acknowledgements: to all the people that helped me with the Spanish version of the book: to my father, Manuel Moreno, for his continued support and help during the whole writing process. To Javier Casares, for his encouragement over the years and for directing my PhD dissertation, which is in the origin of this work. To Ángel Luis López Roa and Pilar L´Hotellerie-Fallois for their decisive support to this project. To Javier Aríztegui, Agustín Carstens and Rodrigo de Rato, for their insightful comments. To Enrique Alberola, Ángel Estrada, Emiliano González de Mota, Juan Carlos González, and specially, Patricia Barbadillo, for their comments to the drafts. To my colleagues: Irina Balteanu, Miguel de las Casas, Víctor Echevarría, Aitor Erce, Laura Fernández, Isabel Garrido, Silvia Gutiérrez, Beatriz Urquizu (particularly, for her help with this English version) and, specially, Manuel Martínez and Xavier Serra, for the debates and the work on the Fund issues, which nurtures my own views. To Amaia Gurrea for her help with logistics. And above all, to my wife and daughters, for being there, and their continued support to develop this project. The analyses, opinions, and findings of this study represent the views of the author; they are not necessarily those of the Banco de España.

CONTENTS

1 The G20 and the rebirth of the IMF

> Des mesures si simples, prises plus tôt, eussent-elles évité la grande crise? Poser cette question, c'est ignorer que les hommes n'acceptent le changement que dans la nécessité et ils ne voient la nécessité que dans la crise[1] *(Jean Monnet, 1976, p. 129)*

The transformation of the International Monetary Fund (IMF or Fund), starting from the autumn of 2009, is part of a broader response driven by the G20 to face the global financial crisis. The global nature of the crisis demanded international responses that have been articulated around three main areas: a New International Economic Order (NIEO); macroeconomic policy measures, and reform of financial regulation and supervision. This chapter analyzes the main elements of these policies to contextualize the IMF reform in the broader context in which it is developing.

We will first consider briefly the anatomy of the crisis, to approximate the elements of global contagion and imbalances that the international economic system has revealed, and second, the international economic policy responses. As we shall see, the G20 has given the Fund a central role in the response to the crisis, significantly strengthening its role in the NIEO and making it partaker in both: the macroeconomic policy responses – endowing it with greater financial muscle and more flexible lending –, and in the new schemes of regulation and supervision.

In this respect, the traditional interpretation of a crisis as an opportunity means – in the case of the IMF – a revival of its role in the NIEO. Indeed, until well into 2008, discussions on the Fund were centered on the risk of a loss of its institutional relevance. The volume of loans had fallen to historic lows, the effectiveness of its surveillance was under question, and the emerging economies in Asia and Latin America were showing disaffection with the Fund after the experiences with the crisis of the second half of the 1990s and early 2000s. The Fund initiated from 2005 a profound reform process to update its policies and governance structure, reforms that in 2009 were accelerated as a consequence of the crisis, "making a virtue of necessity".

1.1 Anatomy of the global financial crisis

The main elements that have led to the global financial crisis are not new. In their seminal paper, Carmen Reinhart and Kenneth Rogoff (2008) conducted a historical analysis of financial crises in the last two centuries,[2] extended in their 2010 article to the link between financial crises and sovereign debt (Reinhart and Rogoff, 2010). In these studies they observe throughout history patterns that can also be identified in the global financial events started with the subprime crisis in the US:

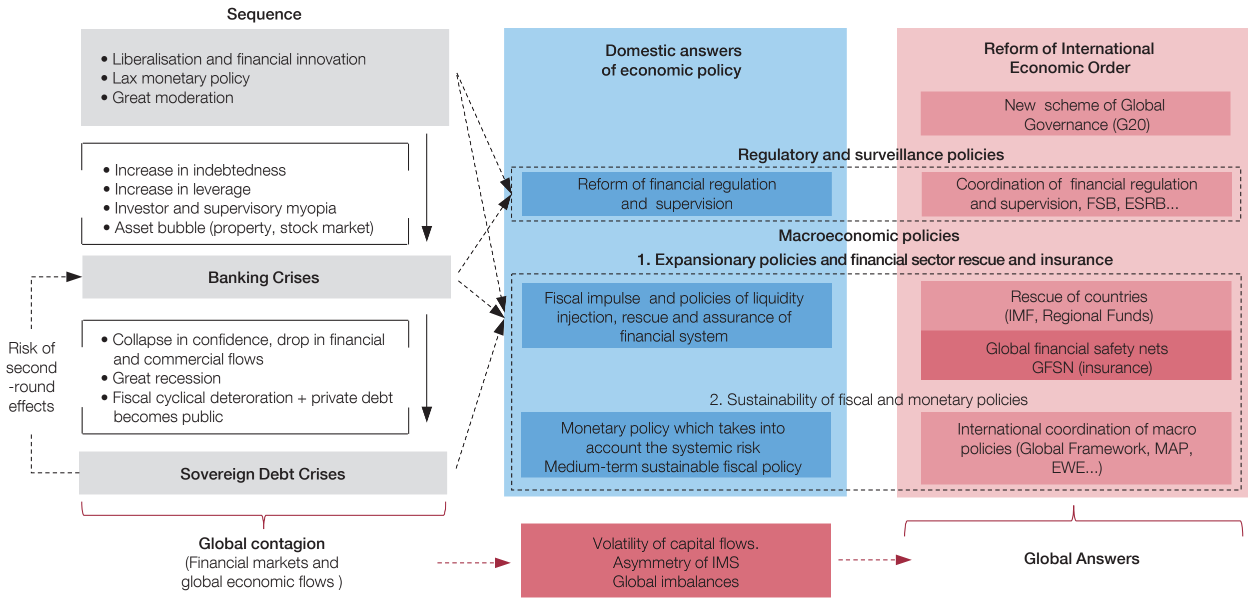
- Global economic factors such as high commodity prices and low interest rates in the central country of the system play a key role in precipitating financial crises.
- Episodes of international crisis in the financial system are often preceded by periods of high international capital mobility.
- Crises affect several countries at once and not just one, therefore they have an international character.

---

1 Having adopted in advance such simple measures, would have prevented the great crisis? Posing this question is to ignore that men only accept change if resigned by the necessity, and only see the necessity in time of crisis.

2 They focus on crisis episodes from 1800, while documenting events dating back to the fourteenth century.

ANATOMY OF THE CRISIS: SEQUENCE, CONTAGION AND GLOBAL RESPONSES FIGURE 1.1



SOURCE: Own elaboration.

— The rapid growth of private (and public) debt is often a recurrent antecedent of banking crises, and the rapid growth of public debt, in crises of sovereign debt.
— High correlation between banking crises and sovereign debt crises. Usually (not always) the first precede (or are linked to) the second, both in emerging as well as in advanced economies.

The authors argue that crisis episodes are spaced in time so that the shortsightedness of policy makers and investors favors a "this time is different" syndrome, triggering a climate of euphoria that precipitates and accentuates the crisis.[3]

What has characterized this crisis has been its high intensity and rapid global spread, placing it next to the Great Depression of the 29 as its closest precedent, and this parallelism, has popularized the term Great Recession to refer to the current crisis. Figure 1.1 summarizes the anatomy of the global financial crisis by focusing on two aspects: (a) sequence and global contagion (left column), which allows to analyze the problems revealed and therefore the type of necessary policy answers, and (b) the policy responses both domestic (center column), and international (right column).

A THE SEQUENCE OF THE CRISIS

There have been extensive discussions among academics and policy makers about the trigger of the crisis with two broad positions. On one side, those who argue that lax monetary policy, especially in the US, is the necessary precedent that explains and produces financial imbalances, and, on the other, those who see the origin of the crisis in financial deregulation. In other words and at the risk of over simplifying, a debate which would place the origin of the crisis, either on the monetary policy led by Alan Greenspan at the US Federal Reserve (FED) and then exported to the world; or on the influence of Hayekian

3 A recent example they argue, is the belief that a high component of domestic sovereign debt is a new feature of the current system that acts as a buffer minimizing the risk of a debt crisis, under the assumption that the domestic creditor may be treated as junior debt that may be reduced via inflation. But historical analysis shows that the probability of debt crisis has higher correlation with the debt level than with its composition. In fact, since 1900 domestic debt is usually on average above 50%.

economics in the deregulation and limitation of the public sector's role in the markets, the dominant academic and policy making orthodoxy in recent decades.

Catte et al. (2010) conducted a detailed analysis of the literature on the determinants of the crisis, which can be summarized in the positions of Taylor (2007) and Bernanke (2010). Taylor identifies the excessively low rates of the FED as the origin of the crisis, noting that if the standard Taylor's[4] rule had been followed between 2002 and 2005, the rates would have been higher and would have mitigated the housing boom. From his side, Bernanke noted that the links in the US between monetary expansion and rapid growth in housing prices are weak. In addition, with the information available at that time, there were reasons to fear a fall of the US in a deflationary trap similar to the Japanese case, thereby justifying an expansionary monetary policy. Ex post it may be argued that the risk of deflation was overvalued but ex ante no one could have predicted it. In consequence, monetary policy played a modest role in the housing bubble and, in any case secondary to the financial deregulation policy.

Today there is some consensus that the origin and magnitude of the crisis can only be explained by a combination of multiple factors including both malfunctions in the financial system and macroeconomic imbalances. The debate is more on the degree of importance to be given to each one of them. To this respect, Bean (2009) points out that you can not single out a unique cause, and proposes a combination of several factors, including: the underestimation of risk during the Great Moderation,[5] monetary laxity in US, international patterns of capital flows, and underdeveloped financial markets in emerging economies.

Under a multi-causal approach and following the historical pattern described by Reinhart and Rogoff (2008), there are a number of factors at the heart of the crisis: an intense process of financial innovation that goes in advance of regulation; lax monetary policy in advanced economies, especially in the US, with generally low global interest rates; global imbalances fueled by excessive accumulation of reserves – especially in China –, which contribute to the crisis artificially sustaining the US borrowing capacity; or appetite for safe assets, mainly satisfied by financial systems of advanced economies because of a lack of an appropriate development in the emerging markets financial sector. The combination of these processes drives successively to: increased investment (residential, productive and financial), high private and public debt, increase of leverage in the financial sector to meet the growing demand, underestimation of risk in the market, and a myopic investment wave, wich will build asset bubbles in stock and real estate markets.

The first signs of asset bubbles go back to the year 2007 when subprime mortgages acquired visibility, although it may be said that until the fall of Lehman Brothers in September 2008 the severity and extent of the crisis was not revealed. From the autumn of 2008, the crisis quickly spread globally through the sudden stop of international capital flows, after recording historically high growth rates. The result is a banking crisis that extends through 2009. In its October 2009 Global Financial Stability Report (IMF, 2009), the Fund estimated overall losses of $ 2.8 billion in the asset value of the banking system,

---

4 The Taylor rule of monetary policy determines the nominal interest rate of reference in function of four variables: nominal inflation measured by the GDP deflator, the real interest rate of long-run equilibrium, the deviation of actual inflation from the inflation target, and the deviation of GDP from its potential path. The rule calls for increase in nominal (and real) interest rates when inflation increases and exceeds the central bank target, or when GDP exceeds its full employment level, and vice versa. In case of conflict, such as in situations of stagflation (inflation above target and GDP below potential), the rule ponders the weight to give to the goals of inflation reduction and output growth (Taylor, 1993).

5 The Great Moderation refers to the long period of macroeconomic stability, sustained growth and low and stable inflation registered in the most advanced countries from the early 1990s (since the mid-1980s in the US case), coincident with the integration of emerging economies into the global economy and the fruits of the structural reforms of the 1980s. Its long duration created a perception of permanence and as a consequence reduction in risk assessment (Bean, 2009).

concentrated in the US (1 billion), United Kingdom (600,000 million) and the euro zone (800,000 million).

The sequence continues in 2010 with the transition from the financial crisis to a sovereign-debt crisis in line again with the Reinhart-Rogoff pattern, concentrated mainly in Europe, but with differences among countries. In general, fiscal policy had not played a role in triggering the crisis, which had its origin in private sector indebtedness. But it will have a central role in its second round with the sovereign debt crisis. Successive bailout policies and macroeconomic stimulus measures in the initial response to the crisis, along with the play of automatic stabilizers in a time of recession, begin to swell public deficits.

The onset of the sovereign debt crisis could be set at the Greek debt crisis in October 2009, (although there were other episodes in 2009: the Icelandic case and some countries in Central and Eastern Europe), when the new Greek government revised upwards its deficit. This revision generated growing market concerns about debt sustainability in some countries of the euro area, in particular with respect to the peripheral countries with low productivity and growth. In May 2010, market pressures forced deep fiscal adjustments in all the major countries of the euro zone. Throughout 2011, there were new rounds of fiscal tightening, the strengthening of the institutional framework for crisis prevention and resolution, primarily through the creation of a new rescue fund, the European Financial Stability Fund and its successor, the European Stability Mechanism; the funding of bailout programs for Greece, Ireland and Portugal in coordination with the IMF; the strengthening of the Growth and Stability Pact and new macroeconomic monitoring directed by the Commission; and the activation of a new financial supervision architecture, the Single Supervisory Mechanism, from 2013.

B GLOBAL CONTAGION: THREE RISK FACTORS OF THE INTERNATIONAL ECONOMIC SYSTEM

The rapid spread of the crisis reveals the severity of a number of imbalances that had been accumulating within the international economic system and will require a coordinated international response. The discussions on the vulnerabilities of the system have been focused in three important risk factors: (1) the volatility of international capital movements, (2) the dependence on the dollar of the International Monetary System (IMS), (3) the global imbalances.[6]

Factor 1 Volatility of international capital flows

In the years prior to the crisis, capital flows had grown rapidly. Between 2002 and 2007 private capital flows to emerging economies had risen from US$ 90,000 to 600,000 million. However, in the last quarter of 2008, after the fall of Lehman Brothers in September, there was an abrupt slowdown in capital flows, a phenomenon of sudden stop, with a freezing of the interbank market, the fall in trade finance, and a general deterioration of market confidence.[7]

The March 2010 report of the Committee on the Global Financial System (CGFS) of the BIS, commissioned by the G20, explains the mechanisms of transmission from the subprime financial crisis in the US, to the dislocation of the global financial system; which can be summarized in the following steps (BIS, 2010):

— Drop in US dollars liquidity. The subprime crisis reduces the size and terms of the loans in US dollars as American banks start to implement a policy of delev-

6 Joaquín Muns refers to the two “original sins” of the Bretton Woods system: the lack of a clear outline on how it was to create international liquidity, and the absence of a scheme for monitoring international capital flows, beyond the weak and ambiguous role for the IMF (Muns, 2008).

7 See Broto, Erce and Diaz-Cassou (2011) for the measurement and determinants of the volatility of capital flows in emerging economies. Guidotti, Sturzenegger and Villar (2004) for a discussion of the policy challenges posed by the sudden stop.

eraging and high quality requirements of collateral. This reduces liquidity in dollars that after the fall of Lehman in September 2008, will be exacerbated with the freezing of loans at a time of high uncertainty in which the accumulation of toxic assets in the system make the banks reluctant to take risks from third parties and choose to increase their precautionary demand for liquidity. In October 2008, interbank swaps against dollars will be discontinued reaching a cost of 400 basis points. To a lesser extent, other reserve currencies such as the euro were also subject to similar pressures.

— Pressure on dollar demand in Europe. The shortage of dollars in the US market has immediate effects on third countries with dollar funding needs especially in the European financial system. European banks had accumulated assets worth US$ 8 billion before the crisis, primarily in long-term assets financed with short-term instruments (deposits) or foreign exchange swaps. Given the difficulties in selling their investment in an illiquid market (and the unwillingness to take losses), they will increase the demand for dollars in third markets outside the US, primarily in Asia taking advantage of the early market opening.[8]

— The dollar shortage affects domestic liquidity and exchange rate stability in emerging economies. The increased pressure on the demand for dollars will also affect emerging economies in spite of its lower exposure in dollars, mainly because they had been relying on their domestic markets. Contagion occurs in several ways: (i) increasing risk aversion leads to flights of capital and a fall in international bank lending to emerging countries and in portfolio investment (stock markets indices fall 60% in Eastern Europe). (ii) Companies usually funded in third markets are forced to return to the domestic market increasing pressure on domestic liquidity. (iii) The dollar shortage affects normal financing activities, short term trade credit rises from 25 to 300 basis points, contributing to a significant decline in international trade. As a result, there is a pressure to currency depreciation of emerging countries and major losses in currency derivatives markets that require interventions to support the exchange rate and contain its destabilizing effects. In addition, the economic and fiscal impact hindered the capacity of governments to conduct countercyclical policies.

Therefore, the result is a crisis that began in the US financial market, spreads rapidly through the international financial markets, largely by the exposure in dollars of advanced European economies, and the accumulation of toxic assets.

The global impact of the crisis will affect mainly advanced economies, but initially, it also touched emerging and developing economies (EMDCs), which had a more balanced debt policy.[9] Unlike the capital account crisis of the 1990s, the effect on EMDCs was not caused by vulnerabilities in their balance of payments but from contagion of failures in the financial markets of advanced economies. The initial effect on the capital markets was not equal in all emerging economies. Those with higher current account deficits (countries of Central and Eastern Europe and South Africa) and those with surpluses weakened by the fall in international commodity prices (Argentina, Russia or

8 European banks secured dollars obtained in Asia during the morning. An important aspect is that in the opening of the American market (European evening), American banks did not want to sell dollars until their own liquidity position was secured.

9 After the initial effects, emerging economies have shown great resilience to the crisis and have maintained a good economic growth since 2009. As noted by Ariztegui (2011), in the case of Latin America, thanks to the lessons learned from past crises, the region was more prepared to tackle the financial turmoil.

Venezuela)[10] were more affected, as well as specific sectors with high exposure to the exchange rate.[11]

Factor 2 The IMS dependence on the US dollar

A second risk is the high dependence on the dollar of the International Monetary System (IMS). The weight of the dollar as an international reserve currency during the decade 2000-2009 stands between 60 and 70% of global reserves, well above the weight of the US economy in the world GDP (24%), or the use of the dollar in financial markets including: daily transactions in the foreign exchange market (45%), cross-border deposits (57%), or cross-border bank loans (54%). The euro is at large distance the second reserve currency amounting about 27% of global reserves in 2009 (compared to 18% in 2000).

In 2009, dollar reserves accounted for about 10% of US GDP doubling the levels recorded in the mid-1980s. The IMF has estimated that even assuming moderate annual growth rates of 8.5% – consistent with a transition to maturity in emerging countries – dollar reserves would reach extremely high levels relative to its source of supply, higher than 600% of US GDP in 2035 (IMF, 2010).

The central role of the dollar poses an asymmetry in the IMS similar to Triffin's dilemma in the Bretton Woods system (Mateos y Lago et al., 2009), i.e., an economy (the US) could not create international liquidity except by borrowing from other countries, namely, creating and maintaining a balance of payments deficit. In the current system, the global demand for reserves is based on the twin US fiscal and external deficits. It produces, therefore, an asymmetry which gives to the US what has been called an "exorbitant privilege" because it enjoys greater macroeconomic policy space giving the greater liquidity of its market via demand of reserves, and because the ability to borrow in its own currency represents capital gains when its currency depreciates, in so far as they hold assets denominated in foreign currency against dollar liabilities. At the same time, the demand for reserves puts downward pressure on interest rates in the US in relation to their theoretical autarky level, encouraging a reduction of savings in the public and private sectors and increasing the risk of unsustainable growth patterns.

These asymmetries introduce in the IMS a dual risk either by excess or shortage in dollar emission. On one hand, a deflationary risk, if not enough global reserve currency is provided. On the other hand, a risk of unsustainable debt in the center country if an excess of reserves is supplied. Thus, the growing demand for safe-reserve assets – US Treasury bonds –, can only be met through a growing indebtedness of the US Treasury, which in turn undermines confidence in the underlying asset that sustains the reserve status of the dollar. Therefore, global inflation expectations and systemic risk is largely linked to the macroeconomic policy of the central economy, which has to balance fiscal and external balances, and provide a safe asset to the world.

Factor 3 Global imbalances

A third source of instability in the international economic system are the so called "global imbalances", related primarily to the high current account and fiscal deficit of the US, and excess savings and reserve accumulation by Asian countries (China especially) and oil exporting economies, but also the high current account surplus in certain advanced econ-

10 In the last quarter of 2008, emerging economies register net capital outflows over 140,000 million dollars, after having recorded net inflows above the 100,000 million during the first three quarters. Similarly, in the bond markets, net redemptions of US$ 27,000 million were recorded in the last quarter (after net loans of 28,000 million in the first three quarters) and bank lending to emerging countries also fell US$ 205,000 million in the fourth quarter (BIS, 2009).

11 In Mexico, for example, pressures on the currency market lead to bankruptcy to important commercial companies (Comercial Mexicana), with high exposure in the currency market.

omies like Germany or Japan. From 2002 on, after the crisis of the dot-com, there is a change in the financing of the growing US current account deficit. Traditionally funded by private capital flows (FDI and portfolio investment), it shifted to being supported by public flows originating in emerging economies with strong reserve accumulation and limited exchange rate flexibility.

These imbalances have played an important role in building up systemic risk, as they decisively contribute to maintain the flows of capital towards US and European banks, keeping low interest rates and sustaining the dollar above its theoretical value or autarky equilibrium. On the other hand, to maintain the policy of outward growth with high current account surplus in a context of strong capital inflows, the emerging country has to accumulate reserves and to adopt contractionary monetary or fiscal policies, compressing domestic demand and investment in the country, and resulting in an international deflationary bias.

While as a result of the crisis the size of global imbalances have been reduced, the steps are being timid and not advancing enough towards the ideal scenario, which would result in: a gradual adjustment of the US deficit, lower savings and lower surplus in China with a renminbi appreciated, rebalancing of growth in emerging economies towards domestic demand, and lower global demand for reserves. Alongside there are risk scenarios resulting from an insufficient fiscal adjustment in the US – or conversely, excessive fiscal adjustment that limits global growth – or poor adjustment of the exchange the and saving rates, or the reform of financial markets in China, which also prevents the exchange rate adjustments in other emerging economies (Blanchard and Milesi Ferretti, 2009).

In short, a crisis that has its origin in the financial systems of advanced economies, ends having a global impact due to a reality of global financial markets and highly interconnected economies. Therefore, the answer must also be international and will require global institutional reforms.

1.2 The IMF at the center of international economic policy responses

The crisis revealed that the international economic order designed at Bretton Woods had become obsolete. The existing institutional framework did not allow to address the challenges posed by the crisis. In a context of global crisis, domestic solutions by advanced economies are not sufficient and a coordinated international effort has been required. It will correspond to the G20 to coordinate this international response, which has mainly focused on three key areas: (a) a New International Economic Order, (b) coordinated macroeconomic response, and (c) reform of financial regulation and supervision. The initiatives related to each one of these areas are summarized in Figure 1.2, highlighting those reforms affecting the IMF.

A A NEW INTERNATIONAL ECONOMIC ORDER

The G20 has prompted significant changes in international economic relations configuring a NIEO. The first step was its constitution as the premier forum for international economic cooperation, replacing the G7, and establishing its configuration at the highest political level, represented by the Summit of Heads of State and Government of the member countries. The G20 represents a rebalancing of power in decision making by adding the perspective of emerging economies and has promoted reforms in all three pillars of the Bretton Woods system,[12] while adding a new pillar in charge of global

12 The Bretton Woods Conference of 1944 recognized the need for an international institution for trade (the later proposed International Trade Organization, ITO) to complement the International Monetary Fund and the World Bank, but the agreement covering trade was not negotiated there. The negotiations on the ITO Charter were successfully completed in Havana in March 1948, but never enter in force because of the lack of Congressional approval in the US. Instead a provisional protocol was signed in Geneva in 1947: "Protocol of Provisional Application of the General Agreement on Tariffs and Trade (GATT)" became de facto the multilateral international institution for trade. In 1994, it was replaced by the World Trade Organization (WTO).

THE POLICY RESPONSES TO THE CRISIS

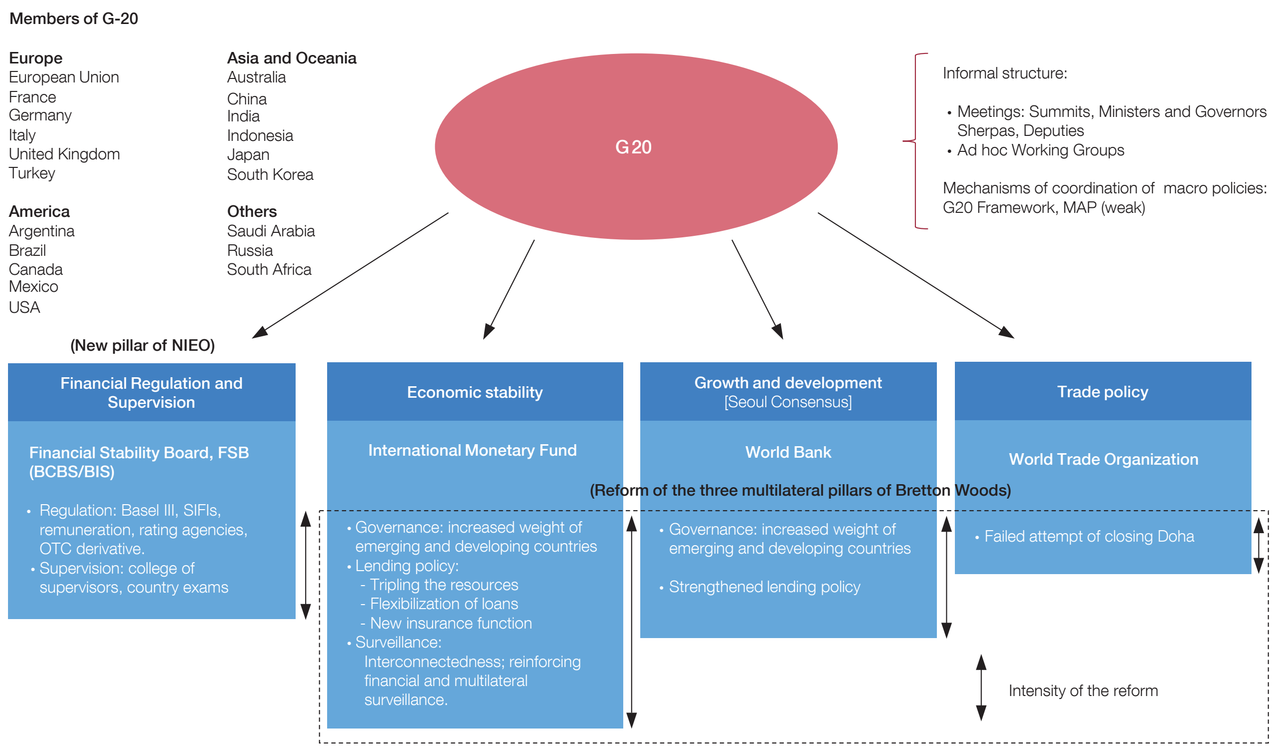
FIGURE 1.2

International economic policy responses	IMF
A. A new international economic order	
— Rebalancing of power in favor of emerging countries: from the G7 to the G20 — Reform of the three pillars of the Bretton Woods system: IMF, World Bank, WTO — New pillar: Financial Stability Board (FSB)	Change in the Governance of the IMF in favor of emerging countries (see Chapter 4).
B. The macroeconomic response to the crisis	
— Macroeconomic Policies: Initially expansionary monetary and fiscal policies and bailouts of the financial system. Since May 2010: increased emphasis on medium-term sustainability and consistency of macroeconomic policies. — International coordination: G20 Framework for Strong, Sustainable, and Balanced Growth, mutual assessment process (MAP) — Rescue programs and global financial safety nets: loans offered by the International Financial Institutions (IFIs), especially through the IMF, are increased; parallel actions performed at bilateral and regional levels (SWAPS bilateral, regional funds)	Tripling of IMF resources, lending policy more flexible and creating a new insurance facility (Chapters 2, 3 and 5). The Fund acts as implicit secretariat in macro policy coordination and strengthens its international macroeconomic surveillance function (Chapter 1).
C. Financial Regulation and Supervision Policy	
— Coordination of global financial regulation and supervision: creation of the FSB + strengthening financial regulation and supervision at regional and national level	Strengthening IMF financial surveillance (Chapter 1).

SOURCE: Own elaboration.

NEW INTERNATIONAL ECONOMIC ORDER

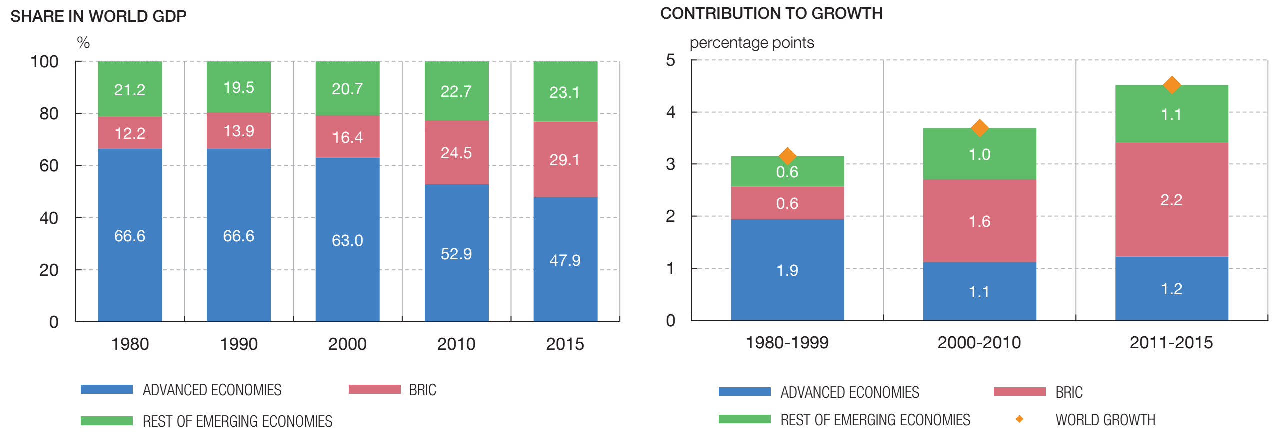
FIGURE 1.3



SOURCE: Own elaboration.

THE GROWING WEIGHT OF EMERGING ECONOMIES

FIGURE 1.4



SOURCE: Carrasco, Molina and Orgaz (2011).

financial regulation and supervision. Figure 1.3 summarizes the key elements of the reform of the NIEO.[13]

From the G7 to the G20

On November 15 2008 takes place in Washington DC the first Summit of Heads of State and Government of the G20. Until then, it was only set up as a meeting of Ministers of Finance and Central Bank Governors. A year later, the Summit in Pittsburgh 24, 25 September, 2009, formalized the transfer of power on the international coordination of economic policies from the G7 to the G20. This transfer is a recognition of the weight of emerging economies and, in particular, of the four countries identified as BRIC: Brazil, Russia, India and China.[14] From entering the twenty-first century, emerging economies take over from the advanced ones in driving global growth, it was only a matter of time that they should also be at the center of economic policy coordination (see Figure 1.4).

There is a decline in the relative weight of the advanced economies in world GDP. With 2010 growth projections, advanced economies will account for less than half of world GDP in 2015 (48%, from ⅔ of world GDP in 1990). From 2000-2012 the growth rates of emerging and developing economies exceeded by 1.5 percentage points that of the advanced economies. Considering the four BRIC countries, their weight in the global economy more than doubled between 1990 and 2012, reaching 26.5% of the global GDP.[15]

In relation to the institutional setting of the G20, it is important to highlight two aspects: first, (i) it lacks a permanent structure. The performance of the G20 is based on an informal structure based on ad-hoc working groups on specific topics and multiple second level political meetings (deputies and sherpas)[16] to allow progress on the proposals. But as pointed out by Solbes and Westendorp (2010), the G20 is not the UN. It is an effective structure in making decisions but poses problems of legitimacy because not all countries are involved (albeit the G20 comprises 85% of global GDP and 62% of the world

13 This section contains elements developed in a former article by the author, Moreno (2010).

14 The emergence of the G20 probably responds to the fact that it was an already existing forum combining advanced and emerging economies. Indeed, before the crisis, the NIEO governance was moving more towards a G8 plus, to include the BRIC.

15 For a detailed analysis of the weight of emerging economies in the international context see Carrasco, Molina, and Orgaz (2011).

16 Deputies are the alternates of Ministers; and Sherpas, the alternates of Heads of State and Government.

population), with notable absence of the developing countries, in spite of the decision at the Seoul Summit to invite at least two developing countries to the summits. In addition, decisions are imposed top-down bypassing multilateral procedures.[17] The French presidency of the G20 in 2011 advanced the goal of providing a more formal structure to the G20, but finally it was decided to maintain a structure supported by the rotating presidencies instead of a fixed secretariat.[18] From 2016 presidencies will be regional starting with the Asiatic group, until then, the presidencies will correspond to Mexico (2012), Russia (2013), Australia (2014) and Turkey (2015).[19]

Second, (ii) the emergence of the G20 reflects that nation-states maintain their relevance in international relations, but at the same time, it also tends to encourage partnerships among countries to achieve enough muscle to guide global decisions. This is the case of the BRICS countries (initially Brazil, Russia, India and China, since 2009, with South Africa joining in 2011) that have strengthened their cooperation since 2009 through annual BRICS summits, and have consolidated a specific weight within the G20 maintaining common positions in many topics (subject to variable geometries on issues like the currency war for example, where China and Brazil had different interests). In the case of the European Union, a number of internal procedures within committees and subcommittees within the Economic and Financial Affairs Council (ECOFIN) attempt to coordinate common positions to be defended by the Commission and the European Central Bank and the five European countries attending the G20 meetings (Germany, France, Italy, Spain and the UK).[20]

The reform of the Bretton Woods pillars

The G20 has also undertaken a reform of the three pillars that arose from Bretton Woods: the IMF, the World Bank (and regional development banks) and the World Trade Organization (WTO). Chapters 2-5 deal with IMF reform, affecting the entire institution, from its governance structures and resources to tits surveillance and lending policies.

Regarding the World Bank, a change in governance is also undertaken in the direction of increasing the weight of the emerging and developing economies, and of increasing its lending resources that has also been extended to the regional development banks. As reflected in Figure 1.5, overall, the multilateral development banks increase their capital by 85% (350,000 million) and nearly two times the volume of annual loans from 37,000 to 71,000 million (G20, 2010a). In terms of lending instruments, efforts have concentrated in reinforcing direct budget support loans with no link to specific projects and greater countercyclical impact.[21]

Furthermore, at the Seoul Summit in November 2010, the G20 consolidates a new strategy for development. The former development agenda had been focused on a generic support of the Millennium Development Goals (MDGs) and the promotion of specific measures such as improving the access to financial services for small and medium enterprises and the poorest (microcredit). In Seoul, a new strategy complementary to the MDGs was adopted, the “Seoul Consensus”, which sets out a number of priority areas in a multi-

---

17 Subacchi and Pickford (2011) propose greater transparency and an independent evaluation mechanism of the G20 commitments to enhance its legitimacy, but keeping the intergovernmental structure in order to maintain effectiveness in decision-making.

18 The Australian Presidency in 2014 will most likely recover the discussion on how to improve the effectiveness of the G20.

19 The five groups of countries are: group 1, China, South Korea, Indonesia and Japan; group 2, Germany, France, Italy and the UK; group 3, Argentina, Brazil and Mexico; group 4, India, Russia, South Africa and Turkey; and group 5, Saudi Arabia, Australia, Canada and USA.

20 Spain is not a formal member of the G20, but has participated as a permanent guest in all G20 meetings since the first Summit in 2008.

21 For a detailed analysis of the World Bank response to the crisis see IEG (2011).

DEVELOPMENT BANKS LENDING PORTFOLIO FIGURE 1.5

Development bank	Capital increase (percentage)	Pre-crisis annual lending 2000-2008 (US$ millions)	2012-2020 projected lending (US$ millions)
African Development Bank	180%	1,800	6,000
Asian Development Bank	196%	5,800	10,000
European Bank for Reconstruction and Development	50%	5,300	11,000
Inter American Development Bank	70%	6,700	12,000
World Bank Group			
International Bank for Reconstruction and Development	45%	12,100	15,000
International Finance Corporation	US$ 200 million	5,400	17,000
TOTAL	**85%**	**37,000**	**71,000**

SOURCE: G20 (2010a).

annual action plan and six principles for policy development: focus on growth as a necessary condition, absence of unique formulas (each country must develop its own strategy), prioritization of global and regional systemic issues, critical nature of the private sector involvement, tangible results, and additionality of the G20 efforts with those of the major international players in development policy (G20, 2010b).

The Consensus is a return to a development strategy based on growth as a necessary condition, including through the promotion of public-private-partnerships, and innovative long term financing instruments. In the post-2015 agenda it will be important to harmonize this approach without losing site of a MDGs-type approach, more centered on reducing specific poverty indicators,[22] since growth has proven not to be enough in the past. It will also be important its insertion into the different multilateral development efforts, especially those led by UN agencies, to avoid duplication.

Finally, with regard to commercial policy, the G20 has been more preventive than active. The financial crisis led to a dramatic decline in global trade in 2009 (12%) as a result of the fall in aggregate demand. It was feared that the situation could worsen if countries had recourse to protectionist trade measures generating a chain reaction. The G20 pledged not to adopt such measures and instructed the WTO to monitor their application. According to the WTO protectionist tensions were contained, so that the measures taken since the beginning of the crisis affected only 1.5% of trade flows, and in 2010, the merchandise trading volume previous to the crisis was exceeded (WTO, 2010). However, in the active front, the G20 has not been able to give a definite boost to the Doha round languishing after 11 years of negotiations. The statement of Seoul in 2010 re-emphasized the importance of concluding the Doha Round with a more assertive language than that used in previous statements, with no tangible results. The Los Cabos communiqué in 2012 did not even mention it.

The creation of a new pillar of financial regulation and supervision

As discussed in section "C" below, the G20 promotes a reform of global financial regulation and supervision, with the activation of a new financial pillar in the NIEO. This pillar institutionally rests on the Financial Stability Board (FSB), which is created in April 2009 (G20, 2009a). The FSB builds on the Financial Stability Forum (FSF), elevated to Council rank and extended to G20 non-FSF-members, plus Spain.

22 The MDGs establish targets in terms of: poverty reduction, universal education, gender equality, reducing child mortality and improving maternal health, and environmental sustainability.

B MACROECONOMIC POLICIES: COORDINATION OR LAISSEZ-FAIRE?

Extrapolating lessons from the Great Depression of 29, some consensus was installed that the exit of the crisis required expansionary monetary and fiscal policies. In successive summits releases from November 2008 until November 2010, the G20 reiterated the need to maintain fiscal and monetary boost. This impulse is not only national but it is also supported by International Financial Institutions (IFIs), especially the IMF. In December 2008, Dominique Strauss-Kahn points to the necessity of macroeconomic impulse to exit the crisis and the willingness of the IMF to assist countries in need (Strauss-Kahn, 2008).

However, after the Toronto Summit in June 2010, and following the debt crisis in the EU in May 2010, growing emphasis is placed on coordinating medium-term exit strategies to the macroeconomic policies. In 2011 and 2012 the focus is on fiscal policies with the fiscal message refined further, and different adjustment speeds are recommended depending on the country, taking into account both the fiscal situation and its systemic importance. Starting in 2013, greater emphasis is placed on coordinating the exit from expansionary monetary policies.

During this process, doubts arise about the degree of coordination of macroeconomic policies in the G20, and to what extent, more than a coordinated effort, there has been an exercise in accommodating economic policies to the interest of member countries from their national perspective. The following sections examine these aspects considering: the national responses to the crisis and the challenges for monetary and fiscal policies, and the new mechanism of international coordination through the Mutual Assessment Process (MAP).

National responses to the crisis

As of 2007, the advanced economies respond to the crisis with massive expansionary monetary and fiscal policies. Central banks in advanced economies responded with a policy of massive liquidity injection in their domestic systems. Interest rates were lowered to levels close to zero, the loan deadlines to the private sector were extended and, in some cases, the types of collateral accepted or the number of counterparties in liquidity provision operations were enlarged, as did the Federal Reserve board (FED) and the Bank of England.

As the crisis intensified in late 2008, the central banks of the major advanced economies had depleted their conventional arsenal and resorted to other types of unconventional operations in favor of specific segments of financial markets or to provide direct support to financial institutions, resulting in a significant increase and changes in the composition of their balance sheets. Figure 1.6 shows the main actions taken by central banks.

The FED was especially active in the purchase of specific assets of the private sector (mainly commercial paper and securitizations, for an amount equivalent to 2.5% of GDP), and the purchase of other assets, such as debt and securitization from mortgage agencies with public support (amounting around 8.8% of GDP). The Bank of England also made some direct purchases of private financial assets, but in a very insignificant amount. Finally, both central banks – as also did the Swedish and Swiss central banks – supported directly some specific institutions, Bear Stearns and AIG in the case of the US, Northern Rock in the case of the UK.

In the first quarter of 2009, the FED conducted a first round of outright purchases of Treasuries (US$ 300,000 million, approximately 2.1% of GDP), as did the Bank of England (200,000 million pounds, 13.7% of GDP). The Bank of Japan accelerates the program of purchases already being applied. In October 2010, the FED announced a second round of quantitative easing (QE2) with a planned purchase of 600,000 million dollars in US Treasury bonds in 2011, maintaining the stimulus injected; a third QE3 in September 2012, with open-ended purchases of US$ 40 billion a month of mortgage-backed securities; and in December 2012

UNCONVENTIONAL MONETARY POLICY MEASURES FIGURE 1.6

Central bank	Markets intervened (financing purchases or outright purchases)
Federal Reserve	Commercial paper, securitized assets, mortgage-backed securities and government sponsored enterprises, treasury bonds purchases, support to specific institutions (Bear Stearns, AIG)
Bank of England	Commercial paper, corporate debt, treasury bonds purchases, support to specific institutions (Northern Rock, RboS, HBOS)
European Central Bank	Corporate debt, covered bonds (including mortgage covered bonds), treasury bonds purchases
Bank of Japan	Commercial paper, corporate debt, shares held by banks, treasury bonds purchases
Bank of Sweden	Support to specific institutions (Kaupthing Bank, Carnegie Investment Bank)
Swiss National Bank	Corporate debt, support to specific institutions (UBS)

SOURCE: Banco de España (2010).

additional injections up to US$ 45 billion in purchases of treasury securities a month, and keeping low interest rates until unemployment falls below 6.5% and inflation remains low.

The ECB had ruled out initially this option, however, in May 2010, facing financial stress arising from the fiscal problems in the euro area, decided to intervene in the public and private debt markets to ensure a proper functioning and facilitate the transmission mechanism of monetary policy (Banco de España, 2010). This support is maintained and intensified throughout 2011 with accumulated purchases of government bonds by the ECB exceeding € 210,000 million. In addition to the support by central banks, most of the advanced economies, and some of the major emerging economies have articulated fiscal stimulus packages and bailout programs to sustain their national financial systems, including measures such as: the establishment of guarantees, capital injections or recapitalization, asset purchases (including so-called TARP),[23] government loans, or nationalization of banks.

The IMF (IMF-G20, 2010) has estimated that by the end of 2009, for all advanced economies of the G20, the resources made available to the financial system were on average 6.2% of GDP, rising to 17% if the guarantees granted to financial system operations are included. However, most of this support pledged at the beginning of the crisis was not used. Effective support is concentrated in advanced economies, and it is estimated to have been around 3.5% of GDP (2.2% for the entire G20), with about 0.8 points already recovered in late 2009 (primarily through capital repurchases and charges on the financial sector). Therefore, the net fiscal cost in advanced economies is estimated at around 2.8% of GDP (about 900,000 million), albeit with large differences among countries.[24]

In short, governments articulate a wide and expensive range of monetary and fiscal instruments in response to the crisis, which are still in force. However, Laeven and Valencia (2010) note that the initial expansionary figures between 2007 and 2009, are not especially significant in historical terms. They compare the actual effort with episodes of systemic banking crises between 1970 and 2009[25] and conclude that the responses have been equivalent to those of previous financial crises.

They note that on average, direct liquidity support is at a 5.5% of deposits and liabilities in the system, below the historical average (10%), a difference accounted by the larger size of the financial system. But monetary expansion has been 6 times the average

23 TARP: Troubled Asset Relief Program.

24 Most of the fiscal cost of the bailout is concentrated in six countries: UK (6.1% of GDP), Germany (4.9%), the US (4.8%), Canada (4.4%), Russia (3.1%) and France (1.1%).

25 A country is considered in systemic crisis if significant instability (high losses, bankruptcies or flight of deposits), and public interventions in the banking system are present. These interventions are considered significant if there are at least 3 of the following 6 types of interventions: liquidity injection of at least 5%; a cost of banks consolidation of at least 3% of GDP; nationalization of significant banks; significant expansion of guarantee schemes; buying of bank assets worth at least 5% GDP, and deposit freezing.

of previous episodes (which stood at 1%, in terms of the ratio monetary base to GDP), due to the fact that previous crises have been concentrated on emerging and developing economies with less scope for expansionary monetary policy.

On the fiscal cost, the average increase of the public debt of 24% is well above the historical average (16%), however the direct fiscal support to banks of 5% of GDP is lower (10% on average in earlier crisis). These numbers are a reflection of the concentration of the current crisis in the advanced economies, with greater scope for expansionary fiscal policies through automatic stabilizers, and/or in parallel, to carry out expansionary monetary policies and setting up schemes of guarantees and bank bailouts.

The challenges for monetary and fiscal policies

After the powerful expansive impulse in response to the crisis, monetary policy faces a double challenge: on the one hand (i) the exit strategy or deleveraging of non conventional instruments that have deteriorated central banks balance sheets, and on the other, (ii) incorporating more or less explicitly in the design of monetary policy the goal of macro-financial stability along with price stability, and/or growth.

(i) In relation with the non conventional instruments, some operational changes such as expanding the types of collateral or the number of usable counterparts probably can be maintained to the extent that they allow a more flexible instrument for liquidity provision. However, in relation to the assets, the goal should be to transfer them – at least partly – to the fiscal authorities or to asset management companies. The main challenge for policymakers is the deleveraging of public assets because of the effect they may have in long-term interest rates and future management of monetary policy (Banco de España 2010). The political debate has been particularly intense in relation with the exit of programs of public debt purchases. In the US, the Congress has questioned the actions by the FED and the successive rounds of quantitative easing. In Europe there has been a particularly acrimonious discussion, including resignations within the ECB Council and demands by Germany to stop ECB purchases as part of the compromise on the reform of the European financial and institutional architecture.[26]

(ii) Moreover, the crisis leads to revisiting the pre-crisis orthodoxy of a monetary policy mainly concerned with the objective of price stability,[27] leaving to the regulatory and oversight policies the objective of financial stability. However, the crisis has shown that price stability in the short term is not a sufficient condition for long term financial stability, in fact, as suggested by Issing (2003), there may be situations of inconsistency between these two objectives.

There is an open debate on the opportunity to recover a monetary policy with multiple objectives, including inflation, economic activity and macro-financial stability.[28] A monetary policy that – in coordination with the regulatory and supervisory policies – takes into account the leverage and overall systemic risk in the financial system to counter po-

26 The Council of 25 October 2011 approves recapitalizations of 9 percent for the banking system, increasing the financial capacity of the European Financial Stability Fund through the ability to leverage and act as insurer to investors in government debt, and the cancellation of 50% of Greek debt.

27 While in practice the monetary policies before the crisis pursue different objectives in different countries, such as growth or exchange rate stability, the pattern that marks the orthodoxy in the design of monetary policy before the outbreak of the crisis is determined by the inflationary objective. Berganza and Broto (2011) analyze monetary policy in 37 emerging economies and show that a flexible inflation target, that is, with punctual interventions on the exchange rate, can be effective in reducing exchange rate volatility.

28 For a discussion of the challenges of financial stability see Caruana (2010).

tential systemic crises. The political and academic challenge is to design a policy able to balance the trade-offs that occur between the different objectives.[29] The IMF contributes to this debate through its reports on challenges and best practices for monetary policy.[30] From 2013, the debate focuses more on the exit strategies from the unconventional monetary policy, once the recovery from the crisis is ensured.[31]

Regarding fiscal policy, April and May 2010 represent a turning point because of the Greek debt crisis. The pressure on European debt markets forces a policy change to advocate medium-term fiscal sustainability. In just two weeks the IMF is going from recommendations of an orderly fiscal exit to demand immediate fiscal adjustment in some countries, especially in Europe. In June, the Toronto G20 emphasizes the design of fiscal consolidation strategies, with a new consensus for setting different adjustment rates depending on the country's fiscal instability. In particular, a target of halving the deficit by 2013 and a reducing trend for the debt to GDP ratio by 2016, with the exception of Japan.

These objectives will largely be met. Nonetheless, from 2011, after the second round of the recession with the contagion of the debt crisis in Europe, the IMF introduced a new twist to its fiscal adjustment recommendations. While, it maintained a medium-term fiscal consolidation objective, the Fund advocates for short-term fiscal stimulus to sustain growth, both in surplus countries, and in those deficit countries supporting global demand, mainly the US. In other words, a fiscal policy that faces the challenge of reconciling multiple simultaneous objectives: countercyclical role, fiscal sustainability in the medium term, sustain the welfare state, promote growth, or take into account the objective of financial stability. This will require a complex design of fiscal policy and as pointed out by Vegara (2010), gaining fiscal margin in good times.

In 2013 the G20 has discussed the new medium term fiscal targets. While initially there has been some discussion around a 90% debt/GDP ratio, in line with the contested Reinhart-Rogoff (2010b) proposal that economic growth declines above this threshold, the uncertainty about the recovery will likely delay any medium-term targets. Most probably, G20 countries will be left with margin to decide on their own paths, with the EU being the more pro fiscal consolidation region.

New framework for international coordination of macroeconomic policies: the MAP

A major challenge for macroeconomic policy has to do with global imbalances and the asymmetries of the IMS, which favor the maintenance of low interest rates. There is some scholarly consensus that the costs of the crisis would have been lower under an alternative scenario of a more balanced growth pattern, less dependent on the US. This could have been achieved through a combination of more restrictive monetary and supervisory policies in the US, with their contractive effect on global growth being offset by structural reforms to enhance the growth potential in Europe and Japan, and with rebalancing policies towards domestic growth and exchange rate flexibility, in Asia (Catte et al., 2010).

In this sense, although initially as a result of the crisis the size of the imbalances has been reduced, it is not clear that we are moving towards the ideal scenario with gradual correction of the US external deficit and rebalancing growth in China (and emerging economies in general), towards domestic demand, a more appreciated renminbi and a reduced global demand for reserves (Blanchard and Milesi-Ferretti, 2009). The challenge

29 For example, higher interest rates may curb the occurrence of bubbles in the financial system, however, they may conflict with the goal of growth, by reducing the path of growth and job creation, but also with the inflation target, because linking interest rates to financial stability alter inflation expectations of the market agents.

30 As a basic report on the IMF's analysis see IMF (2010a). Friedman (2007), pointed out the excessive complacency in the economic community and the remaining challenges for monetary and fiscal policy management.

31 For a detailed analysis of monetary policy challenges and the challenge of exit strategies see, respectively, Hernando, Llopis and Valles (2012), and Rajan (2013).

for the G20 – and largely for the G2 (US-China) – is to reconcile the internal with the external effects of macroeconomic policies that at the end are primarily determined by domestic considerations.[32]

International policy coordination can be approximated from the viewpoint of game theory. Coordination is facing a problem of non cooperative Nash equilibrium where countries do not cooperate either because of the disparity of national interests, or because of different diagnosis of the economic situation, and thereby on the effects of the policies.[33] The result is a Stakelberg-type behavior, in which the dominant country applies its macroeconomic policy and the rest acts as followers accommodating their policies.

In 2006, the IMF had already tried to approach the problem of global imbalances through multilateral consultations.[34] These consultations sought to become a sort of ad hoc “Gs” meetings depending on the type of problem to be faced. It was intended to seek consensus on the analysis of global imbalances involving the main actors (Saudi Arabia, China, US, Japan and euro area) to find coordinated solutions. This process yielded few results, and multilateral consultations were discontinued after a single report (IMF, 2007).

The crisis has driven the establishment of a new framework for macroeconomic policy coordination within the G20,[35] the Framework for Strong Sustainable and Balanced Growth, activated at the Pittsburgh Summit in 2009 (G20, 2009b). This Framework aims to coordinate macroeconomic policies for the common goal of growth and correction of global imbalances. This is an exercise that allows a joint analysis of the economic policies of the countries that will complement those made by international organizations such as the IMF, OECD, the World Bank, but with the added value of being a peer analysis, adding pressure to try to influence national policies.

The IMF plays a central role in the Framework by developing the analytical background for the subsequent decision of the G20, and acting as technical secretariat. In particular, the IMF elaborates the main reference document of the MAP, which is drawn from the assessment by the country of its own policies in response to a template. This report values the global economic outlook and the consistency of economic policies of the countries with an emphasis on their effects on the rest of the world and suggesting alternative policy scenarios to avoid policy inconsistencies.

However, the effectiveness of this new coordination mechanism is yet to be determined. In the first two years after the fall of Lehman, macroeconomic policy coordination within the G20 has been simple, consisting of little more than a laissez-faire in which each country has implemented the policies it deemed necessary, from a general consensus that Keynesian impetus was needed to avoid the mistakes of the Great Depression of 29.[36]

---

32 For an analysis of the internal political constraints that explain the position of the leading countries in relation to exchange rates see Steinberg (2010).

33 Fisher (1987) studied the case of expansionary fiscal policy coordination in the 1980s. While the benefits of coordination are clear – a coordinated expansion avoids problems of current account deficit generated in a country when it is the only one undertaking the fiscal stimulus – in practice, cooperative equilibrium is difficult for various reasons: different modeling among countries makes it difficult to reach agreement on the outcome of coordination, differences in economic policy objectives, or asymmetric policy impact depending on the size of the countries under coordination.

34 The Fund has participated in the international coordination of macroeconomic policies since its inception. Coordination was given increasing attention after the breakdown of Bretton Woods in the 1970s, during the 1980s resulted in the Louvre and the Plaza Agreements, and continued in the early 1990s with the discussion of target zones for exchange rates (Ceña and Hernandez, 1995).

35 In 2010, the EU also initiated new procedures to strengthen the monitoring of fiscal policies of member countries under the Stability Pact, including new rules for the excessive deficit procedure, and new guidelines on budgetary frameworks of the member countries.

36 In fact, initially there was little coordination. This was the case for example of the Netherlands unilaterally increasing to 100,000 Euros the coverage to depositors – adopted later at European level – with the risk of bank runs from third countries. The same is true of the initial US concern to provide liquidity to its own financial system when the dollar shortage was global, though the FED in a second phase established a series of bilateral swaps.

The problem begins to emerge at the time of coordinating exit strategies. As we saw, the Toronto Summit in June 2010 began to show dissension among major economies on the diagnosis of the problems, the scope and pace to be followed in fiscal consolidation strategies, or lack of consensus on a tax on the financial system to finance the bailout costs.[37] At the Seoul Summit in November 2010, the debate focused on monetary policy and exchange rates, ignited with the second round of quantitative easing announced by the FED in October. This is a remake of the debate on global imbalances, which in Seoul is labeled in terms of "currency wars".[38]

Given the political difficulties to reach an agreement within the Seoul Framework, in 2010 the can is kicked forward by creating a working group to work in 2011 on the methodology of the MAP. The Cannes Summit endorses the work carried out by this group in two stages, in the first one, indicators are agreed to identify members with large imbalances (finally China, France, Germany, India, Japan, US and United Kingdom) and, in the second, the causes and its main features are analyzed.

In general terms, the reports find that inadequate saving rates are the main cause of the imbalances establishing a six point medium-term action plan to strengthen the foundations of sustainable growth: (i) commitment to fiscal consolidation, (ii) commitment to increase private demand in countries with current account surpluses (mostly emerging) and to change the engine of growth from public to private demand in those with current account deficit (advanced countries), (iii) structural reforms to enhance growth and job creation, (iv) reforms to strengthen financial systems at national and global levels; (v) open trade and investment, and (vi) to promote development. The guidelines are to be reviewed in 2013.

The Framework has not demonstrated a clear effectiveness in economic policy coordination within the G20. Imperfect coordination symptoms have appeared and there is risk of reversion to national responses with consequent negative externalities.[39] However, looking ahead to its future effectiveness there are a number of elements to be optimistic:

(i) Shared analysis and recommendations. The failure in Seoul to agree on the exchange rate coordination, activated the Seoul Action Plan, whose main element was the strengthening of the MAP in 2011 establishing a framework to determine what constitutes a large imbalance and how it should be corrected, and to make country recommendations;

(ii) An independent observer, the IMF, evaluates policies and prepares the analytical reports to the frame;

(iii) The process engages all relevant global actors (the G7 din not include emerging countries) and at the highest level because it involves the heads of state and government of the G20;

(iv) There have been signs that, faced with serious problems as with the Greek debt crisis, immediate action has been taken, agreeing targets for fiscal consolidation, deficit reduction and debt stabilization by 2013 (Toronto Summit). Moreover, peer pressure, though slightly, has given some positive signs, as in the case of China, who came to the two summits of 2010 allowing a slight appreciation of the renminbi as a sign of goodwill.

---

37 The cost of the bailout of the financial system has introduced an intense debate on the mechanisms for the banks to pay the cost of its own rescue. The G20 summit in Toronto in June 2010 highlighted the impossibility of reaching an international agreement on the subject (countries like Canada or Australia refused to tax their financial sectors not affected by the crisis). The result has been uncoordinated actions in which each country is setting its own taxes (with coordinated efforts within the euro area). The emphasis of coordination in the G20 has been focused on reducing costs and on the reforms to prevent future crises.

38 Term popularized by Brazilian Finance Minister Guido Mantega.

39 See Fernández Ordoñez, 2010.

The framework is a starting point to build up in time reinforced international economic coordination. Although supported by soft sanction mechanisms, as the explicit mention of infractions or the requirement to explain policies, they probably represent a necessary first step in a gradual process of increasing global surveillance.[40] The Framework at least provides a forum to discuss the topics it has probably avoided worse uncoordinated outcomes, had it not being there.

It should be noted that in parallel to the development of MAP, the Fund has strengthened its surveillance since 2009 in two main directions: the integration between multilateral and bilateral surveillance, and the strengthening of financial supervision. Both trends have been confirmed in the triennial surveillance review of 2011. Beyond its role within the Framework, the Fund should continue to exercise and improve its own independent surveillance role.[41]

C THE PENDULUM OF FINANCIAL REGULATION AND SUPERVISION

The financial sector reform has been central to the agenda of the G20 since the first Summit in 2008 in Washington, with a specific action plan for the financial sector, subsequently enriched in the different summits. In 2009 in London, a particularly important step is taken with the creation of the FSB as the main forum for coordinating regulation and global financial supervision, configured as a new pillar of the NIEO.[42] The FSN completes an institutional framework for reforming the global financial system joining other central institutions, namely, the Bank for International Settlements (BIS) and the Basel Committee on Banking Supervision (BCBS).[43]

The international coordination efforts in the context of globalized financial markets acquire particular importance, where the effectiveness of policies depends heavily on a broad application to avoid arbitration of financial institutions and markets between different jurisdictions. Following, the main reforms will be discussed distinguishing between: the revision of the regulatory schemes; reforms in the financial surveillance and supervision. Both aspects are necessary, because in the origin of the crisis there were both deficiencies of rules (regulatory task), and shortcomings in their implementation (supervisory task).

Expansion of financial regulation[44]

On financial regulation, the G20 Summit in London in April 2009, issued a Declaration on Strengthening the Financial System (G20, 2009b), with initiatives in three broad areas: (i) regulation perimeter, (ii) prudential regulation, and (iii) macro-prudential regulation.[45]

(i) In relation to the perimeter, the crisis has revealed that not all institutions with potential systemic effects were under regulation (shadow banking), or their regulation was insufficient. The pre-crisis regulation did not calibrate well the importance of systemic risk arising from the activity of a large group of non-bank intermediaries – which, on the other hand, were instrumental to financial innovation – trusting that the regulated banks as their clients would watch over their discipline. In practice there has been no such control of the market, and in addition, a regulatory arbitrage was taking place so that many of the financial derivatives associated with the securitization process have allowed regulated banks to engage in unregulated trading.

40 For a detailed analysis of the Framework see Estrada (2012).
41 The next section develops changes in financial surveillance of the IMF.
42 Fernández y Estella (2011) raise the possibility of further increasing the rank of the new pillar creating a World Monetary and Financial Organization twin to the WTO.
43 See Viñals et al. (2010) for an analysis of the main challenges facing the financial sector.
44 This section includes passages and ideas of other articles by the author: Moreno (2009) and Moreno (2010).
45 See Garcia-Andres (2009) and Saurina (2009) for an analysis of the regulatory challenges uncovered by the crisis.

(ii) Some deficiencies have also been uncovered in prudential regulation of certain risks at the center of the crisis, such as those associated with off-balance sheet products, or the risks of tail events. These aspects have driven to the establishment of new prudential measures, including initiatives such as the generation of liquidity buffers, or requirements related to off-balance sheet exposures and capital protection against the cycle.[46] The result has been the adoption of new prudential standards.

(iii) Traditionally, regulation has focused on the soundness of individual institutions, but the crisis has shown that the sum of the risk of individual entities is not equivalent to the systemic risk, so that an independent regulation and supervision of each entity is not enough to control for the interconnections among entities and the whole system's risk. The G20 has incorporated mechanisms of macro-prudential regulation and supervision (the new "it" policy for financial sector authorities), so as to take into account, on the one hand, the potential systemic risk that may cause the entity (beyond its financial and accounting position) and, second, the pressure points and macroeconomic transmission channels between countries building up in the system (associated, for example with: excess liquidity, sector imbalances, exchange rate risks or declines in asset prices).

Alongside the regulatory task, the G20 has also promoted specific market discipline measures. Among them, the call for a review of accounting standards in the case of off-balance sheet activities to move towards a unified framework of international standards.

From 2010, the initial fruits of the work commissioned by the G20 to the FSB, the BIS and the BCBS are being collected. The main one is the adoption of Basel III accord on banking regulation. The new rules will improve the transparency and consistency worldwide and set up more stringent liquidity and quality of capital requirements, raising minimum capital from 2% to 4.5%. It also establishes an additional 2.5% cushion of capital reserve and liquidity standards (both short and long term) to curb excessive leverage in the system. These measures will be phased in from 2013-2018.

In 2011, the FSB adopts a specific framework for financial institutions of systemic importance, or SIFIs (identified as "too big to fail") which includes measures such as more intensive supervision, a new standard for national resolution schemes reducing the likelihood and impact of its bankruptcy, cooperation arrangements between supervisors to transnational institutions, or an extra buffer of capital reserves of 1.5% on the basis of a risk-weighted assessment of assets.[47]

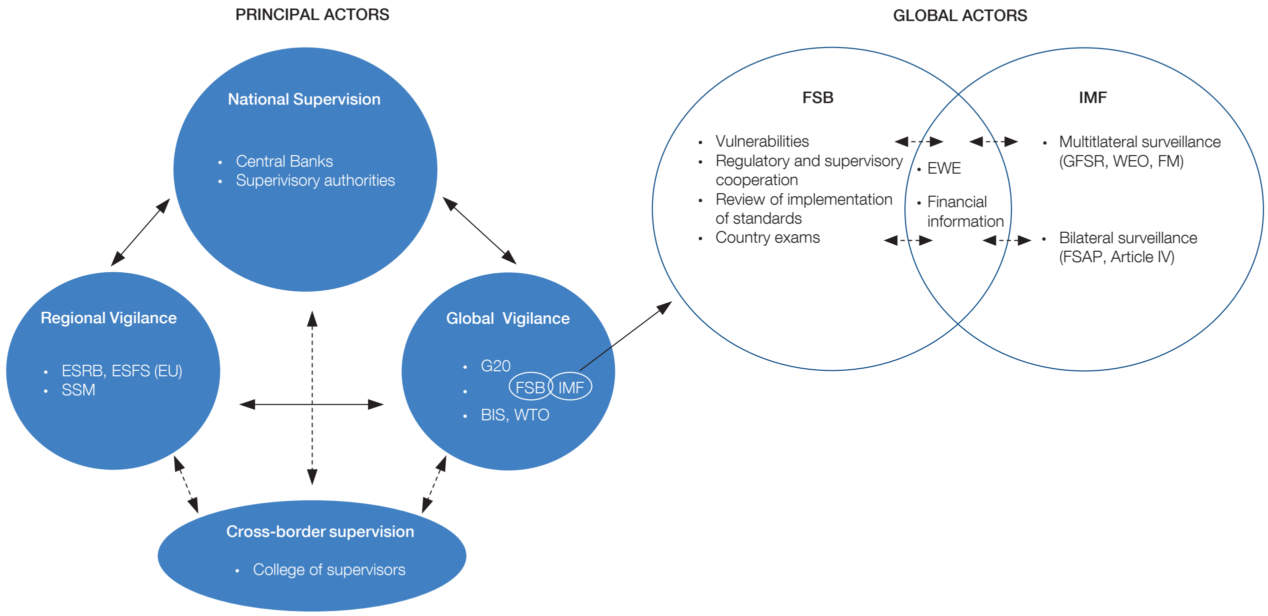
The FSB and the BCBS have also developed new rules on risk management and supervision including the standardization of OTC derivatives contracts and guidelines on executive compensation, public information and market discipline, or less reliance on risk rating agencies. Other initiatives include measures to strengthen the regulatory framework for rating agencies or hedge funds, or the development of principles for remuneration schemes, so as to better adapt them to the time horizon of risks assumed. National supervisors will evaluate remuneration policies as part of the overall strength of the entity.

---

46 In these areas, the regulatory experience of the Bank of Spain has gathered special attention, in particular, dynamic provisioning, and the requirement for financial institutions to strengthen the balance sheet for structured investment vehicles (SIVs). For an analysis of the Spanish experience and its application to new macro prudential regulatory instruments, see Alberola, Trucharte and Vega (2011).

47 The debate on SIFIs has been particularly complex in the FSB because the different responses designed in Europe and the US For a comparative analysis of these strategies see Goldstein and Véron, 2011. For a summary of the main regulatory measures promoted by the G20 see Roldán (2011).

GLOBAL FINANCIAL SUPERVISION AND SURVEILLANCE FRAMEWORK FIGURE 1.7



SOURCE: Field and Moreno (2010).

In short, there has been a pendulum swing from deregulation towards greater financial regulation. As anticipated by Raghuram Rajan in 2005, the challenge is to create incentives for more efficient operation of markets and avoid the kind of behavior – excessive risk taking and abuse of information asymmetry – that generated the crisis, and at the same time to create buffers to mitigate the effects of future crises that inevitably will come.[48]

There is also a challenge linked to the risk of an over-regulation that may introduce inefficiencies in terms of limiting credit growth needed to support the economic recovery itself, or to introduce regulatory arbitrage behavior by the market, to escape regulation.[49] Excessive regulation can also hinder the implementation and thus the credibility and legitimacy of the measures. Therefore, for regulators, the problem is – based on a cost-benefit analysis –, generate the right incentives to improve market discipline and minimize the unintended consequences in terms of restrictions on the activities of financial institutions.[50] Finally, the regulation must necessarily be complemented with strong and effective supervision, allowing for effective implementation of the new regulations.[51]

A new framework for financial supervision and surveillance[52]

Global financial markets are subject to a broad surveillance framework including national, regional, and global actors. Figure 1.7 summarizes this network with the actors at different

48 In 2005, the then chief economist at the IMF, Raghuram Rajan, in a study that has subsequently been recognized as one of the first founded anticipations of the crisis, warned of the accumulation of risks in the financial system (and the inevitability of crises in general) and recommended regulations that improve the incentives of financial managers (Rajan, 2005). From the perspective of behavioral economics, Conthe (2007) gives several examples of irrational behavior in financial agents.

49 The regulation by itself may generate incentives for new tools to circumvent the regulatory perimeter. It is a race between the regulator and financial agents in which the former tends to lag behind. Repullo (2009) warns of the overregulation risks.

50 The theoretical framework for cost-benefit analysis is not new. Market failures can be analyzed through economic theory tools as: principal and agent, externalities or erratic behavior (mood swings), but scholars should work on refining the models for financial markets after the lessons learned from the crisis.

51 In this sense, Varela and Varela (2008) put more emphasis on inadequate supervision rather than regulatory failures as the origin of the crisis.

52 This section includes passages and ideas expressed in a joint article by the author, Field and Moreno 2010, where Figure 1.7 was also published.

levels. The starting point and the most important one, is the national supervision (the larger balloon in Figure 1.7). The domestic supervisor is the first responsible, and the only one with the ability to ensure micro-prudential supervision of their institutions and to impose penalties for non-compliance (this will change in the case of Europe when the euro-area single supervisor is established).

However, the scope of national authorities is limited because national supervisors do not have the tools and information necessary to monitor the performance of financial groups when they act well beyond their borders. In this case, monitoring is covered with another actor in the system, the college of supervisors, which bring together supervisors from countries where the institution operate. The global financial crisis is causing a revision of these supervisory actors through redefining and implementing new standards and best practices of international supervision.

On the other side, national authorities do not have enough pressure elements (even less sanctioning instruments) to ensure overall macro-financial stability in highly interconnected financial systems subject to contagion (using an analogy, an Icelandic volcano can cloud the European [financial markets] sky). This calls for transnational financial supervision and surveillance. Since 2009, there have been many initiatives to strengthen financial supervision, both globally and regionally.[53] The G20 has prompted a new financial surveillance based on two central institutions: the FSB, and the IMF.

Other international organizations have also led surveillance policies in their respective areas. This is the case of the World Trade Organization (WTO), with respect to compliance with international commitments on trade in financial services, or the Financial Action Task Force (FATF) in relation to the assessment process and compliance with standards on money laundering and terrorist financing. Within the Bank for International Settlements (BIS), the International Committee on the Global Financial System (CGFS) and the Markets Committee have incorporated into their regular tasks the monitoring of bailout programs. We will discuss the main elements of the FSB and IMF supervision.

The FSB was established as the reference institution for international coordination of financial regulation, but it has also assumed the following main functions in the area of global financial supervision:

(i) Surveillance of the international financial sector. Assessment and monitoring of vulnerabilities affecting the global financial system, to identify and implement measures to address them. To this end an ad hoc steering committee has been established. This surveillance includes a joint exercise with the IMF, the so called Early Warning Exercise (EWE).
(ii) Coordination of cross-border financial supervision. The FSB coordinates the efforts of supervision of cross-border financial groups on three fronts:
    — Colleges of supervisors. The FSB promotes the establishment of colleges of supervisors for cross-border groups. Notwithstanding that

53 To highlight, in Europe, the articulation of a European System of Financial Supervisors that revolves around two new groups of institutions: on the one side, in the field of macro-prudential supervision, the European Systemic Risk Board (ESRB) with identification functions and prioritization of macro-prudential risks, and, where appropriate, recommendations for action. On the other side, a number of authorities that oversee the coordination of regulatory and supervisory micro-prudential practices in various financial markets: the European Banking Authority, the European Insurance and Occupational Pensions Authority and the European Securities and Markets Authority. These three authorities, with higher rank and competences, have replaced the former Committees in each of the three sectors. Further, in 2012, Europe launches a banking union with a Single Supervisory Mechanism (SSM). And, in the United States, with a complex web of bank and insurance regulators at the state and federal levels, a Council of Regulators has been established, chaired by the Treasury to monitor systemic risks, and the Federal Reserve endowed with supervisory functions of systemic risk institutions. See Field and Perez (2009) for a more detailed analysis of the reforms in Europe, and Gonzalez-Mota and Marques (2010) in the US.

each college has to be adapted to the group, sector principles (banking, insurance) are being developed to ensure consistency among colleges.

— National monitoring. Work is under way to compile the lessons and critical success factors and best practices from the different national supervisory models and identifying the areas where it might be advisable to increase the intensity and effectiveness of the supervision.

— Crisis management. Developing action principles in situations of stress and financial system crisis. The FSB has promoted the establishment of crisis management groups, which bring together representatives of the supervisory authorities, central banks, ministries and authorities of the international financial groups.

(iii) Country Exams. These exercises are periodic reviews of compliance with the international standards of regulation and supervision and analysis of the country's financial system. They are performed by a team of experts and their findings are discussed in the FSB. These exercises probably present problems of duplication with the Financial Sector Assessment Program (FSAP) developed by the IMF (in fact its own review is based on the findings of the FSAP) and will require better coordination between them.

At the IMF, since 2009, the surveillance has been deeply reviewed to better take account of economic and financial interconnections. A number of new reports and reforms were undertaken in response to the crisis, that were later confirmed in the Fund's 2011 triennial surveillance review. The restructuring of surveillance has undertaken two main directions: integration between multilateral and bilateral surveillance, and the strengthening of financial surveillance (see Figure 1.8).

On the surveillance of the financial sector, the IMF's experience is very recent, it does not begin to take on a more formal character until the latter half of the 1990s as a result of the Asian crisis[54]. At that time it was decided to strengthen the financial sector coverage of the reports made under Article IV[55] of each country and two new reports were introduced on the Fund's surveillance instruments: the Financial Sector Assessment Program (FSAP) and the GFSR. The FSAP is a bilateral surveillance tool created in 1999 in conjunction with the World Bank in order to analyze in detail the financial sectors of each country and assess their risks. The GFSR is created in the field of multilateral surveillance in 2002 to discuss global financial markets, complementing the WEO,[56] by analyzing the financial ramifications of macroeconomic imbalances.[57]

In the last decade, the IMF has also strengthened its expertise and its departmental structure in the financial area. In 2001 the Capital Markets Department was created, which later, in 2006, merged with the Department of Monetary and Financial Affairs, into the new Department of Monetary and Capital Markets (MCM), raising its Director to the rank of Financial Counselor (parallel to that of the Economic Counselor).

However, the global financial crisis has revealed that this strengthening of financial surveillance has been inadequate, and the IMF has promoted the following major reforms in its bilateral financial surveillance:[58]

---

54 Gola and Spadafora (2009) traced back the beginning of the surveillance of the financial system to the late 1980s with the research and technical assistance related to financial deregulation.

55 Article IV of the IMF Articles of Agreement provides for bilateral surveillance of its members.

56 WEO: World Economic Outlook.

57 The GFSR was born as a quarterly report in 2002, but it shortly became biannual after 2003, coinciding in time with the publication of the WEO in March / April and September / October.

58 See IMF (2010b) and IMF-World Bank (2009) for a more detailed analysis of changes in financial supervision, and IMF (2010c) for changes in the overall surveillance framework.

THE REFORM OF IMF SURVEILLANCE (2009-2012)

FIGURE 1.8

Since 2009, the fund has strengthened its surveillance mechanisms moving from an analysis that was traditionally centered on a macroeconomic and balance of payments analysis of individual countries, into a more integrated approach in two main directions: the links between multilateral and bilateral surveillance, and the strengthening of financial surveillance.

The figure represents these main tendencies reflected in a larger dark shaded area of the intersection between the circles of bilateral, regional and multilateral surveillance (with the size of the circles representing the weight of the different layers, smaller in the case of regional surveillance, which has been streamlined from 2013).

The most relevant initiatives since 2009 include[1]: (i) Introduction and review of multilateral surveillance instruments such as: the Global Policy Agenda (the successor of the initial Consolidated Multilateral Surveillance Report), which integrates the key findings of the WEO, GFSR and Fiscal Monitor; the review of these two reports to address macro-financial linkages and cross-border issues, and to adopt a more incisive language[2]; a report focused on fiscal policy (Fiscal Monitor); and a new early warning exercise (EWE[3]). (ii) Development of cluster consultations (of a group of countries) and new thematic reports on international economic and financial affairs, which emphasize cross-country analysis (e.g. reports on financial interconnections, transnational financial institutions, or compared labor markets). (iii) For systemic economies, an additional report on spillovers together with the Article IV reports, which analyzes the impact of the domestic policies on its economic partners and regionally or globally (spillover reports)[4]. (iv) On financial surveillance: the strengthening of bilateral financial supervision in Article IV reports, and regular – at least every 5 years – Financial Stability Assessments (FSA) for countries with systemic financial systems[5]. (v) And in 2013, the streamlining of the Regional Economic Outlook Reports (REOs), and specially, the approval of the Integrated Surveillance Decision (ISD). As a substitute of a reform to the Articles of Agreement on Surveillance (for which there was no consensus), the ISD formalizes the new scope of IMF surveillance already undertaken since 2009, explicitly recognizing Article IV consultations as vehicles for both bilateral and multilateral surveillance, and going beyond macroeconomic policies, by endorsing the analysis of spillovers and country's economic and financial policies.

1 For a more detailed analysis see Field and Moreno (2010) and Guzman (2010).

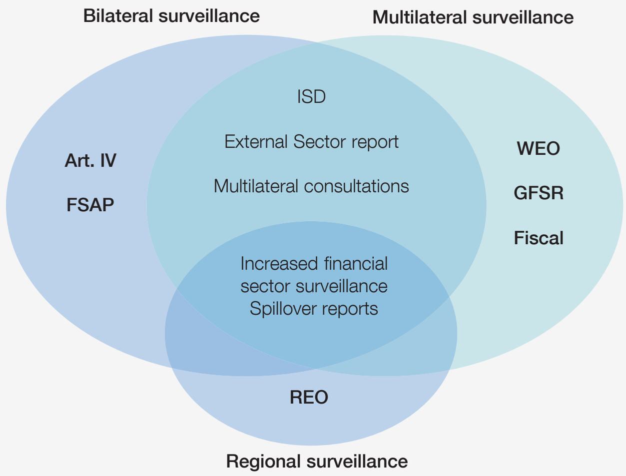
2 For example, the April 2007 GFSR warned of the excessive accumulation of risks in the subprime mortgage market in the US, and the risks of contagion in global markets. However, the alert did not permeate, among other reasons, because the lack of strength in the message, lost in a lengthy and analytical report, rather than one of alerting and policy recommendations (Field and Moreno 2010). This contrast with the September 2011 GFSR warning of recapitalization needs in Europe that lead to the subsequent decision of the European Council in this regard.

3 The EWE complements the GFSR and WEO identifying tail risks and vulnerability scenarios. Beyond the analytical supplement, the advantage of the EWE is the presentation in restricted format to Ministers and Governors in the spring and annual meetings of the IMF.

4 This exercise has started with five pilot reports for China, the US, Japan, UK and Euro Zone (IMF, 2010ñ).

5 The financial analysis has also been strengthened in the Regional Economic Outlook (REO) reports.

IMF SURVEILLANCE



SOURCE: Own elaboration.

(i) Review of the FSAP program. The FSAP failed to effectively warn about the risks in the global financial system. It is symptomatic that the country where the crisis originated, the US, had not conducted a FSAP despite the insistence of the Fund. In any case, it is not clear that it would have been effective. In countries with FSAP like the United Kingdom (UK) and Belgium, the significant risks in their respective financial systems were not detected. Probably the FSAP reports were obsolete and of an overly mechanical nature, centered only in checking if the country complied with certain international standards.

The IMF reacted fairly quickly to these deficiencies, reviewing the FSAP to make it more flexible, incorporating specific modules of financial stability, periodic updates, and focusing on country-specific weaknesses. On the other hand, the commitment to carry out FSAP reports for all countries with economies of systemic importance has been formalized (including all G20 countries). The Fund is also making progress in updating the FSAP exercise and in integrating its findings in Articles IV and in multilateral surveillance, thereby better capturing the transnational linkages of financial systems.

(ii) Analytical framework and financial information. The crisis has also revealed the complexity of the interconnections of the international financial system and the speed of adjustment of the markets, in many cases, a step ahead of the supervisor. The IMF is working on improving and continuously updating its analytical tools.[59]

Another important element is the access to relevant financial information to conduct effective oversight. This work is being done in conjunction with the FSB under the mandate of the G20. Both institutions produced a report on financial information gaps (data gaps) that concluded with twenty recommendations, including the collection of data on the links between financial institutions and the development of indicators of financial stability (IMF-FSB, 2009). This is a particularly sensitive area involving confidentiality of financial data and can only be conducted in full cooperation with the national authorities.

In short, the G20 has fostered a new framework for global financial regulation and supervision, arguably building a new international pillar alongside the traditional three of the Bretton Woods system (IMF, World Bank and WTO). In this new pillar, the institutional framework would be based on two central institutions, the FSB and the IMF. The reforms are still under development and it will take some time to evaluate its effectiveness. Both institutions are facing major challenges including the necessary collaboration between the two to avoid duplications.[60]

In this sense, the division of labor between the IMF and the FSB should be based on the different character of the two institutions. The FSB is a small institution with limited resources but great political leverage because of the presence of the key players in making economic policy decisions, the ministries and the central banks. It is an institution called to coordinate national supervisory schemes and develop inter-peer monitoring. The IMF has a large independent international civil service but less political leverage. Therefore, the Fund is best suited for independent evaluation functions, surveillance and technical support to countries.

59 In this area the Fund has launched new tools and methodologies on macro-financial linkages and sensitivity analysis (IMF, 2010a).

60 A clear risk is duplication may occur with the FSB's country exams and the Fund FSAP exercise.

2 Crisis Resolution: a history of adaptation to the needs of its members

> El mundo de nuestros días no es el de los años cuarenta, cuando se planificó la organización económica a la que nos estamos refiriendo [Bretton Woods]. Toda clase de acontecimientos políticos, económicos y sociales han condicionado su evolución y las políticas de los organismos internacionales *(Manuel Varela, 1996, p. 24)*.[1]

One of the Fund's main responses to the global financial crisis has been the flexibilization of its lending policy. As we will discuss in Chapter 5, the new lending policy will provide a framework for crisis resolution with greater access to resources and less conditionality, and will create a new insurance function for the Fund.

The details of the lending reform were not improvised; many of the changes had been previously discussed and, in fact, reflect a logical evolution of the Fund's policy. The crisis will accelerate the lending policy reform and give it new direction in accordance with the actual necessities of member countries. In this regard, through its life, the Fund has proved resilient enough to adapt to the changing needs of the international economic environment, although in some cases with certain delay. In parallel, developments in lending policy could not be addressed without parallel progress in IMF resources, which constitute its budget constraint.

This chapter deals with the main facilities of the IMF's lending policy and with its resources, under the prism of the most relevant aspects that will affect the reform initiated in 2009. In order to frame this reform within a historical perspective,[2] it is interesting to distinguish three major reform periods: (1) 1945-1963: the first steps, the Stand-By Arrangements; (2) 1963-1995: the development of "a la carte" menu of financial facilities, and (3) 1995-2008: the capital account crisis and large-scale funding. Finally, it will be discussed how the adequacy of IMF resources has been ensured over the years, including the tripling of resources decided by the G20 in 2009, and the additional temporary loans ensured in 2012.

2.1 1945-1963: the first steps: Stand-by Arrangements or SBAs

The IMF granted its first loan to France on May 8, 1947 for US$ 25 million, seventeen months after the entry into force of the Articles of Agreement (December 27, 1945). Between 1947 and 1951 continuous discussions took place on the requirements for a country to be granted a loan when it exceeded five percent of its quota. It was during these years that the Board moved away from the concept of automatic lending and settled down the idea of progressive conditionality (Horsefield, 1969, p. 189, 276).[3]

The approval of the "Rooth Plan"[4] in February 13, 1952 is the starting point of the IMF's lending facilities, of what from October began to be known as Stand-By Arrangements or SBA (with an earlier loan to Belgium on 19 June of that year). The Plan formalizes

1 The world today is not that of the 1940s, when the organization to which we refer [Bretton Woods] was planned. All kinds of political, economic and social developments have conditioned its development and the policies of international organizations (Manuel Varela, 1996, p. 24).

2 The focus of the analysis is the policy instrumented through the IMF General Resources Account that represents more than 95% of IMF loans. Nevertheless, there will also be reference to the concessional financing to developing countries.

3 Reference works for a historical analysis of the IMF are the studies of the Fund's chief historians, including J. Keith Horsefield (1969), Margaret G. de Vries (1986), and James M. Boughton (2001). Other classical references are Manuel Guitián (1992), Manuel Varela (1969 and (ed.) 1994), with emphasis on the relation with Spain. As a benchmark report on lending facilities see IMF (2000), which also includes a historical analysis.

4 On behalf of Ivar Rooth, IMF Managing Director between 1951 and 1956.

access to resources for a certain period (usually between 6 and 12 months), and ensuring, at the same time, its recovery with an agreement by the country to repurchase the loan over a maximum period of five years. In this way, the revolving nature of the Fund's resources was guaranteed (Horsefield, 1969, p. 324, 328-332).

The SBA, since its origin constitutes the backbone of the Fund's lending instruments and its main features will be present in the various facilities built up over the years. Its basic structure was shaped between the late 50s and the 60s, formalized with the 1968 conditionality guidelines, and later revised in 1979 and 2002. Its basic structure: tranched loans, conditionality, and access limits, will remain virtually unchanged until the 2009 reform.

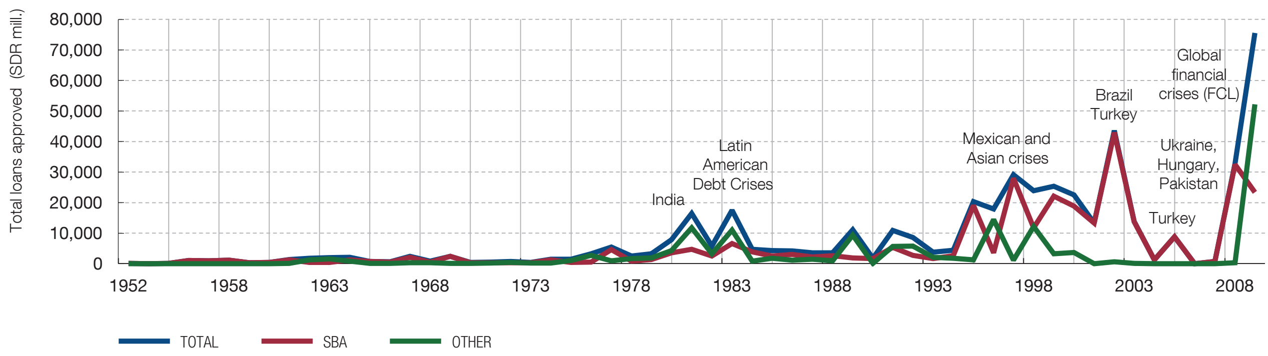
(i) Phasing and conditionality. The IMF offered loans in what has come to be known as the credit tranche policy. The country quota is divided into four equal tranches. The granting of the first credit tranche is made on highly concessional terms. From the second one on, a policy of "upper credit tranches" is applied, requiring assertion that the country could solve the balance of payments problems and therefore repay the loan. The first example of a conditional agreement dates from 1957, when Peru is required to abandon interventions in the foreign exchange market as a prerequisite to continue the purchases under the SBA. Later, the Paraguay agreement introduced performance criteria, suspending access to the SBA in case of non compliance. Since 1964, the performance criteria would be the common practice (Boughton 2001, p. 557-558).

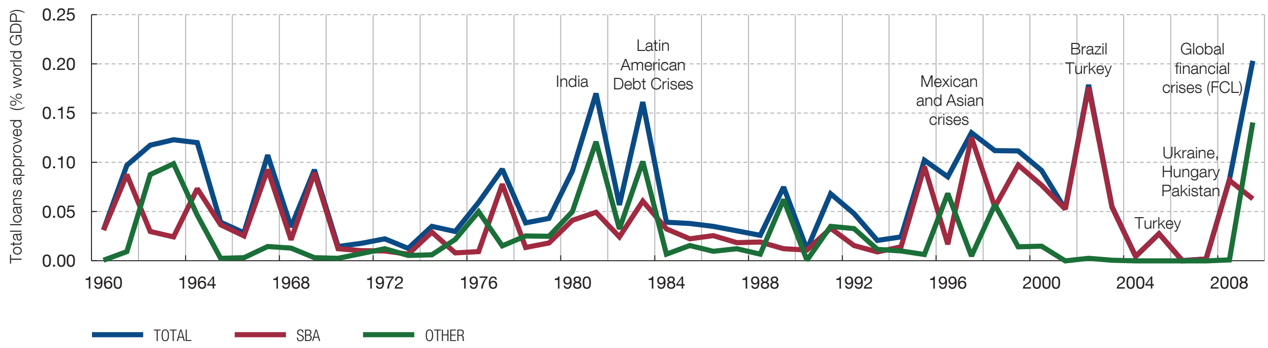
Thus a guaranteed scheme is developed, based on disbursements by tranches, subject to conditions. In addition, a dual date setting system is established for repurchases (buyback)[5] with a "mandatory date" to repurchase in five years, and an "expectation date" for earlier repurchase if the balance of payments situation improves. As we shall see, the 2009 reform introduced the possibility of greater frontloaded disbursement, limiting the staggering of disbursements (in a staircase pattern), and eliminating the dual date setting with the repurchase obligation posted in a single date. In addition, new insurance facilities are introduced eliminating ex post conditionality.

(ii) Access limits. The various facilities were subject to access limits fixed in proportion to the country quota. In principle, the SBA limit was established at 100% of the quota, however, in practice, it could be overcome with the Board's approval. Later, not only the limits were increased, but also the creation of new facilities with their own limits and compatible with the country holding an SBA at the same time, thereby opening ways for greater access. The result is that in the 1980s the IMF was implementing a complex system involving several types of limits (annual, triennial, accumulated and dual). In 1992, as part of the IXth General Review of Quotas, the system was simplified to establish only two limits: one year limit of 68% of the country's quota (in 1994 it was raised to 100%), and a full or accumulated limit of 300% of the quota; while the Board maintains the capacity to approve programs with higher limits (IMF, 2003). These normal limits remain unchanged until the reform of the lending policy of 2009, which also introduced a facility, the Flexible Credit Line (FCL), without a pre-established access limit.

5 IMF loans are implemented as loans in hard currencies against domestic currency. In the terminology of the Fund, "purchases" refer to the acquisition of hard currency by the country and repurchase to the recovery of the domestic currency.

HISTORICAL IMF ANNUAL LENDING: SBA PROGRAMS AND OTHER PROGRAMS FIGURE 2.1





SOURCE: IMF data.

In 1978, SBA agreements were incorporated as such in the Articles of Agreement of the IMF in its Article XXX. B): "Stand-by arrangement means a decision of the Fund by which a member is assured that it will be able to make purchases from the General Resources Account in accordance with the terms of the decision during a specified period and up to a specified amount."

As shown in Figure 2.1, the SBAs have been the dominant type of loan (in terms of resources provided) in IMF programs, except in some years dominated by the Extended Fund Facility (EFF).[6] As discussed in Chapter 5, since 2009, the resources committed through the new uncapped FCL will increasingly weight in total loans.

2.2 1963-1995:[7] developing a menu of financial facilities

After the core lending principles were established and formalized in the SBA, since 1963, and along more than 30 years, the IMF developed a comprehensive lending policy making it a central actor of the international economic system, and clearly demonstrating its flexibility in adapting to the evolving financing needs of its member countries.

Against the general approach of the SBA, which provides coverage in any general situation of balance of payments difficulties, the many facilities developed since 1963 are intended to cover particular balance of payments needs. Loans are associated with a specific source of external imbalance, usually on the current account side. In some cases they had a complementary nature to SBAs, thereby providing additional resources, in others, they were substitutes.

6 In the 1980s, because of the EFFs granted to: India (SDR 5,000 million) and Pakistan (900) in 1981; Peru (650) in 1981; Mexico (3,400) in 1983; the Philippines (660), Mexico (3,700) and Venezuela (3,800) in 1989. And in the 1990s, for those granted to: Argentina (4,000) in 1992; and Russia (13,000) in 1996.

7 This is an extended time period which would allow for other classifications. The criterion used here is the activation during these years of many facilities which have in common their main focus on current account imbalances.

These three decades witness a blooming in the lending policy. From the perspective of the post-2009 reform, it is interesting to note two aspects: (a) the specialization of facilities, including the financing to developing countries; (b) two major trends: excessive proliferation and the settlement of a structural approach to balance of payments. As we will see, these trends will be reviewed since the year 2000 and, especially, with the post-2009 reforms.

A SPECIALIZATION AND LOW-INCOME COUNTRIES FACILITIES

From 1963, specific facilities are developed depending on the type of balance of payments problem. Figure 2.2 chronologically shows the facilities created between 1952 and 2011. Three main types of facilities could be distinguished depending on the imbalance they are designed for:[8] (i) exogenous shocks; (ii) structural problems – including funding to low income countries –; and (iii) emergency and ad hoc situations.

Facilities to cover balance of payments shocks

Among the facilities activated since 1963, the Compensatory Financing Facility (CFF), is the service – after the SBA – with the longest run, more than 46 years, among the Fund's financial instruments.

The CFF was created in 1963 to meet temporary balance of payments difficulties as a result of an exogenous shock.[9] It was a low-conditionality facility with rapid disbursement of resources, initially conceived to cover losses in merchandise export revenues, but in 1979 it was extended to other current account lines, such as tourism receipts and remittances, and later, in 1990, to cover all current account balance of payments concepts, excluding investment income. In 1981, the CFF broaden its scope to the import side with the addition of a component of cereals, mainly for humanitarian reasons. The country could use this component in case of sudden increases in the international price of cereals. In 1990-1991 a second import component was temporarily added to cover increases in oil prices during the first Gulf War.

The CFF was granted independently and as a substitute for other facilities such as the SBA with its own access limits between 10 and 55 percent. However, between 1988 and 2000 a contingent component was activated to cover export income falls as consequence of an exogenous shock in countries already under a program (during these years the tag "contingency" was added to the facility denomination, Compensatory and Contingency Financing Facility CCFF). Therefore, the CCFF was allowed to be mixed with other Fund programs providing additional resources.

As noted by Boughton (2001), this facility, by its very nature, has been controversial since its inception. The temporary or structural character of a balance of payments crisis is a conceptual difference difficult to establish in practical terms, which has generated recurring controversy in the Board. The result is that, over time, CFF has undergone numerous modifications in access limits and conditions. Initially, relatively flexible, the conditions begin to tighten, especially from the mid-1980s when it starts to permeate at the Board the theory that exogenous shocks in many cases contain structural balance payments difficulties. As a result, the CFF will become a very complex instrument subject to a varied casuistic of different components and access limits, relying even on subjective criteria such as the condition of a successful cooperation with the Fund. As noted by Boughton (2001, p. 738), it degenerated into a facility of self-destructive complexity.

In 2000, the conditions of access were hardened and the contingent component is removed, finally, in 2009 the CFF would be eliminated after almost a decade of disuse.

---

8 Other relevant classification criteria, especially from the mid-1980s, is the distinction between facilities for low-income countries (concessional) and the rest. For our discussion here, these ones are included in the group of facilities to meet structural requirements.

9 This section is based on IMF (1999) and IMF (2004), which provide a detailed analysis of the history and characteristics of the CFF.

MAIN FINANCIAL FACILITIES OF THE IMF: CHRONOLOGICAL APPEARANCE, 1952-2011

FIGURE 2.2

[Term] Facility/ Credit Line (Acronym)	Contingencies covered
[1952- current] Stand By Arrangement (SBA)	Countries facing balance of payments needs. Main IMF lending instrument by excellence.
[1963-2009] Compensatory Financing Facility (CFF) [1988-2000] Compensatory and Contingency Financing Facility (CCFF)	It is designed to cover balance of payments difficulties resulting from a temporary decline (rise) in export (import) prices of countries, as a consequence of fluctuations in primary commodities prices attributed to factors beyond the control of countries. CFF provides funding between 10 and 55% of the quota in an independent program. In 1988 a component for contingencies was added to provide financial support in the event of an exogenous shock as a complementary facility to those members who have already a Fund arrangement (this facility included the contingency term in its name).
[1969-2000] Buffer Stock Financial Facility (BSFF)	Conceived to finance the members of the international agreements for primary commodities stabilization stocks.
[1974-1976] First and Second Oil Facilities	Facilities to face petroleum price shocks in the 1970s. They were financed ad hoc by funds with specific contributions of official creditors of third countries.
[1974- current] Extended Fund Facility (EFF)	Established to provide assistance to countries experiencing balance of payments difficulties where it is required a structural adjustment program with changes in economic policies to boost growth and export base of the economy. It offers a longer repayment period (up to 10 years) and initially longer access limits (although they become equivalent to SBA in 1979).
[1979-1981] Supplementary Financial Facility (SFF)	Designed at a time of high interest rates, it is adopted to provide additional low interest resources to low income countries which already have an ongoing IMF program (SBA o EFF). The financing conditions are those of the already existing program. It is also funded by ad hoc official resources.
[1982-2011] Emergency Natural Disaster Assistance (ENDA) [1995-2011] Emergency Post-Conflict Assistance (EPCA)	In 1982, Fund formalizes a rapid access in the presence of natural disaster which in practice had been applied under specific circumstances since 1962 (Egypt received a loan because of an epidemic plague, having gold as collateral). It allowed a rapid access up to 25 % of the quota, although the Board could raise it. In 1995, the emergency assistance is extended to post-conflict situations to countries with institutional capacity, but not enough to develop a full program. In 2001, the interest rate was subsidized for less advanced economies. For these countries, the ENDA and the EPCA disappeared de facto in 2005 when they started to be financed by the ESF. Nowadays, they are marginal facilities for semi-developed countries which do not have an access to concessional financing (which can access the RCF).
[1986, 1987-1999] Structural Adjustment Facility (SAF) and Enhanced Structural Adjustment Facility (ESAF)	In 1986 the SAF is created to respond to the balance of payments difficulties of low income countries (the eligibility criteria are based on the eligibility under the International Development Association, IDA, of World Bank). It incorporates a concessional element, which was financed through official contributions from third countries committed under a trust fund. One year later, the SAF is strengthened and reformulated.
[1989-2000] Debt and Debt Service Reduction (DDSR)	IMF facility supporting the reduction of external debt for countries that have already an IMF program (with which the DDSR shares the same maturity). It allows a country the access to resources in order to make the agreement with commercial creditors easier. The later policy of IMF to reduce the debt would go much further with the initiatives of cancelling the debt. Firstly, in 1996 under the activation of the initiative for Highly Indebted Poor Countries (HIPC), and later, in 2005, under the Multilateral Debt Relief Initiative (MDRI), which includes canceling the country debt with multilateral creditors.
[1993-1995] Systemic Transformation Facility (STF)	Financial facility for the support of countries facing balance of payments problems caused by the transition from a planned to a market economy.
[1995-2000] Currency Stabilization Funds (CSF)	It provides additional financial assistance with precautionary character (up to 335% of the quota) in support of a stabilization policy of exchange rate for countries that already have a program with the IMF (SBA, EFF).

MAIN FINANCIAL FACILITIES OF THE IMF: CHRONOLOGICAL APPEARANCE, 1952-2011 (cont´d)

FIGURE 2.2

[Term] Facility/ Credit Line (Acronym)	Contingencies covered
[1997-2009] Supplemental Reserve Facility (SRF)	Supplementary to SBA and EFF, it covers the capital account of balance of payments needs, which are exceptional, due to a crisis of confidence in the international markets. It does not have predetermined access limit.
[1999] Poverty Reduction and Growth Trust (PRGF)	A new facility that reorganized the facilities for low income countries to integrate them into a new joint multilateral framework with the World Bank. It evolves around the Poverty Reduction Strategy Paper (PRSP), which are developed for each country.
[1999-2000] Y2K	A temporal facility to cope with possible information technology effects in the turn of the century (year 2000). It was never used.
[1999-2003] Contingent Credit Lines (CCL)	First attempt to establish a precautionary facility to cover capital account exogenous shocks. It expired without ever being used. Presumption of access between 200 and 500% of the quota.
[2005-2009] Exogenous Shocks Facility (ESF)	It is created in the scope of the PRGF, to add a rapid and high access component for low income countries which are facing exogenous shocks and do not have a PRGF program (for those, the IMF simply increases its support). The ESF replaced the ENDA and the EPCA for low income countries which received these kinds of emergency aid loans through Trust Funds.
[2008-2009] Short term Liquidity Facility (SLF)	The initial response to the global financial crises. Disbursement of Fund resources can be up to 500% of the quota, with a three month maturity. It lasted from October 2008 to March 2009 when it was replaced by FCL.
[2009-current] General Resources Account (GRA) facilities (see figure 5.1)	Flexible Credit Line (FCL): assurance for countries with very strong solid fundamentals subject to exogenous shocks. Precautionary and Liquidity Line (PLL): insurance for countries with moderate vulnerabilities to cope with exogenous shocks, a liquidity window is added in 2011.
[2009-current] Facilities to low income countries (see figure 5.3)	Extended Credit Facility (ECF): replaced the PRGF. Stand-By Credit Facility (SCF): SBA- type line for low income countries that includes concessionality. Rapid Credit Facility (RCF): facility for temporary exogenous shocks.
[2011-current]	Rapid Financing Instrument (RFI): replaced the ENDA and the EPCA. The emergency financial assistance of IMF is unified in one facility to cover urgent balance of payments needs with general nature (including these aspects as natural disasters, post-conflict situations and commodity price shocks). Accessing is limited to 50% and 100% on cumulative terms. It is financed through the GRA.

SOURCE: Based on IMF information. On shaded grey, facilities that still remain active.

Four years earlier, in 2005, the IMF had created a facility that replaced the functions of the CFF, the Exogenous Shock Facility (ESF), later also removed in the context of the reform of facilities for low-income countries (LICs, see Figure 5.3 in Chapter 5). The ESF covered the same type of contingency (an exogenous shock), but intended only for LICs, precisely the main consumers of the CFF, and more attractive, because it incorporates an element of concessionality (0.5% interest with maturity of 10 years). The CFF, provides a first precedent of the insurance function of the Fund – albeit of limited scope in time and for a very specific casuistic of current account risks –, which will be fully developed from 2009.

The group of facilities to cover balance of payments exogenous shocks also includes the Buffer Stock Financing Facility (BSFF), created in 1969 to assist countries in their contributions to stock funds under international agreements to stabilize commodity prices. The BSFF was the Fund's contribution to international efforts to stabilize commodity prices that were considered too volatile. The country could access this facility in case of balance of payments needs as a result of having to cover mandatory contributions to an international agreement previously accepted by the Fund.[10] This facility disappears in 2000, after having been in disuse for 15 years. The practice showed the limited success of buffer stock funds and their signaling problems, as a country resorting to the IMF for a stock fund contribution, would only reveal higher difficulties (IMF, 1999).

Facilities to cover balance payments structural problems and financing for development

In 1974 the Extended Fund Facility (EFF) was created to cover balance of payments difficulties that require structural adjustments, aimed at boosting economic growth and the country's export base. It is therefore a facility with an approach diametrically opposed to the CFF (covering temporary shocks). The EFF is focused on countries with balance of payments problems of a structural nature, requiring a major adjustment period than the one provided by SBAs, offering assistance in the medium term with higher repayment periods, up to 10 years, and initially higher access limits. These limits will be made equivalent to those of SBAs in 1979. This service is still alive and is currently the second oldest facility of the Fund (after the SBAs).

The EFF launches a structural approach to the balance of payments crisis that will be reflected in all Fund's facilities. Thus, the different loans will incorporate a growing structural component in their conditionality. This approach will undergo a radical change in the review of the facilities in 2009.

The facilities oriented to meet specific needs of developing countries could also be included within the scope of structural facilities.[11] In the 1980s a series of facilities were designed specifically for these countries, also with a structural approach to the balance of payments. The central facilities of the Fund's strategy for low-income countries between 1986 and 2008[12] were successively: the Structural Adjustment Facility (SAF),[13] the Enhanced Structural Adjustment Facility (ESAF), and the Poverty Reduction and Growth Facility (PRGF).[14] These programs will be financed through additional resources, outside the General Resources Account of the IMF. These are facilities with a large component of structural conditionality with a medium term program graded to ensure the long-term viability of the balance of payments and to promote sustainable growth in the country (see Figure 2.3).

---

10 The IMF recognized as international agreements that allow for access under the BSFF: cocoa, tin, sugar and cork.

11 In fact, the EFF was born oriented towards developing countries, but nevertheless, will be widely used by emerging economies, especially from the 1980s with the debt crisis, and lately by advanced European countries since the 2010 debt crisis.

12 In 2009 the IMF will also reform funding to low-income countries as we will see in Chapter 5.

13 The Board choose this name among others considered, such as Trust Fund II or Special Disbursement Facility. Finally the denomination «Structural Adjustment Facility» was adopted, which emphasized the condition that the country should adopt a comprehensive adjustment program (Boughton, 2001, p. 651).

14 For a detailed analysis of IMF policies with developing countries see IMF (1998) and IEO (2004).

THE FRAMEWORK OF IMF SUPPORT TO DEVELOPING COUNTRIES (1986-2008)

FIGURE 2.3

Between 1986 and 2008, the IMF's support to developing countries is articulated through two main ways: specific programs for low-income countries, and the initiatives of debt relief.

Financial facilities for low-income countries. In March 1986, the IMF started a specific policy for low-income countries, with the creation of the Structural Adjustment Facility (SAF), which will be expanded and reformulated in December 1987 into the Enhanced Structural Adjustment Facility (ESAF), subsequently extended and converted into permanent service in 1996. The ESAF being more ambitious in relation to macroeconomic policy and structural reforms than its predecessor.

The ESAF is a financial facility intended for low-income countries as defined by the International Development Association (IDA) of the World Bank. It provides resources of up to 185% of the quota, including a grant element in interest rates (annual rates of 0.5%), and a repurchase period up to 10 years, therefore more favorable than the EFF. Concessionality is funded from a trust fund managed by the IMF and nurtured by loans and grants from member countries.

In November 1999, the Fund reorganized its facilities for low-income countries and replaced them with the Poverty Reduction and Growth Facility (PRGF). The PRGF was the IMF's response to the new multilateral framework to support developing countries in conjunction with the World Bank, which was structured around joint strategies embodied in the document called Poverty Reduction Strategy Paper (PRSP), aimed at ultimate objective of growth and poverty reduction.

Each country designed – in collaboration with the World Bank and IMF – its own PRSP, around which they tried to coordinate the development efforts of multilateral institutions and bilateral donors. The design of the PRSP by the country itself is linked to the consolidation within the Fund of the "ownership principle", whereby the success of a program largely relays on its appropriation by the country. This new strategy requires IMF programs to reinforce the consistency of macroeconomic policies with the elements of poverty reduction contained in the document.

This new framework will strengthen the principle of specialization between the Fund and the World Bank, according to their comparative advantage. This is a debate that has been recurrent in the first decade of implementation of the PRGF. Thus the Fund's PRGF programs are oriented toward the areas of macroeconomic policy design and the necessary financial and structural reforms to carry them out, such as tax administration or economic institutions reforms.

Debt relief initiatives (DDSR, HIPC and MDRI). In 1989, within the context of the Brady Plan to restructure the debt of developing countries, the IMF promotes the Debt and the Debt Service Reduction (DDSR) approach, which provides resources for countries with strong adjustment programs, and voluntary debt restructuring under market conditions. In 1996, the IMF and the World Bank trigger the initiative for Heavily Indebted Poor Countries (HIPC) that provides debt relief and concessional loans in order to cancel or reduce external debt for countries with unsustainable debt.

In 2005, to promote progress in achieving the Millennium Development Goals, the HIPC Initiative was supplemented with the Multilateral Debt Relief Initiative (MDRI), which provides 100% relief of debt with multilateral institutions – the IMF, the IDA, the African Development Fund, and the Inter-American Development Bank (since 2007) – for countries that have completed the HIPC initiative[1].

1 For a more detailed analysis of multilateral debt relief see Delgado, Martinez-Rolland and Ortiz (2005).

Assistance facilities to address emergency situations and ad hoc facilities

Over the years, the Fund has also created a series of facilities for emergencies as well as for specific shocks (ad hoc facilities).

The emergency assistance for natural disasters was activated in 1982, formalizing a fast track in case of natural disasters, which in practice had been applied in some cases since 1962. It allows quick access to 25% of the quota, a percentage that the Board may decide to rise. In 1995, emergency assistance is extended to post-war situations, if the country demonstrates institutional capacity and willingness to carry out incipient economic policies. These facilities allow quick access to resources with the expectation that the country will later undertake a conventional facility.

On the other hand, the IMF has created ad hoc facilities to meet balance of payments needs related to a particular shock and with a limited duration in time. Among them:

First and Second Oil Facilities, activated between 1974 and 1976 to deal with shocks in oil prices. This is a prime example of a rapid and temporary IMF response in the context of a global crisis, financed by trust funds endowed with official contributions from third countries. In the same vein, as we have seen, the CFF incorporated an element of oil in 1990 during the Gulf War.

In a context of high international interest rates in 1977 the Supplementary Financing Facility (SFF) was established to provide additional resources at low rates to low-income countries that already had in place a program with the IMF (SBA or EFF). It is also financed with external resources.

The Systemic Transformation Facility (STF) activated between 1993 and 1995 to support countries facing balance of payments problems as a result of the transition from a planned to a market economy. It was soon substituted with conventional facilities.

Year 2000 Facility (Y2K), established between 1999 and 2000 to address the possible computer effects of the new century. It was never used.

B TWO MAJOR TRENDS: PROLIFERATION OF FACILITIES AND STRUCTURAL APPROACH TO BALANCE OF PAYMENTS

Proliferation of facilities

As we have seen, between 1963 and 1995, there is an excessive proliferation of lending facilities. Taking into account the new facilities, or the renovation and expansion of existing ones, they are close to thirty, each one designed to meet different types of external imbalances. If we look at a chronological classification (Figure 2.1), we see that many of them are linked to the global economic cycle between the 1960s and the 1990s. Thus, during the oil crisis of the 1970s and the Gulf crisis of early 1990s, there are facilities to deal with oil shocks. The same applies to the late 1990s, with the activation of new facilities to allow fast access to large resources of the Fund, for countries facing capital account crises (EFM, SRF, CCL). In addition, the Fund is also active during these years with new facilities to meet the needs of low-income countries (SAF, ESAF, PRGF), establishing a role for the IMF in development.

The succession of facilities is reflected in the type of country and regions to which the IMF lends. Since the 1980s, the advanced economies, which were the main borrowers during the previous three decades, are substituted by emerging countries as main users of Fund resources (see Figure 2.4). From 2010, however, the second round of the global financial crisis manifested in the sovereign debt crisis in Europe relocates advanced economies (European) as the first Fund borrowers.

Therefore over the years, the Fund shows flexibility and capacity to give rapid response to the various crises that countries have been facing, and thus fulfilling its role as guarantor of international economic stability. As we will see in Chapter 5, the same flexibility will be played in the global financial crisis.

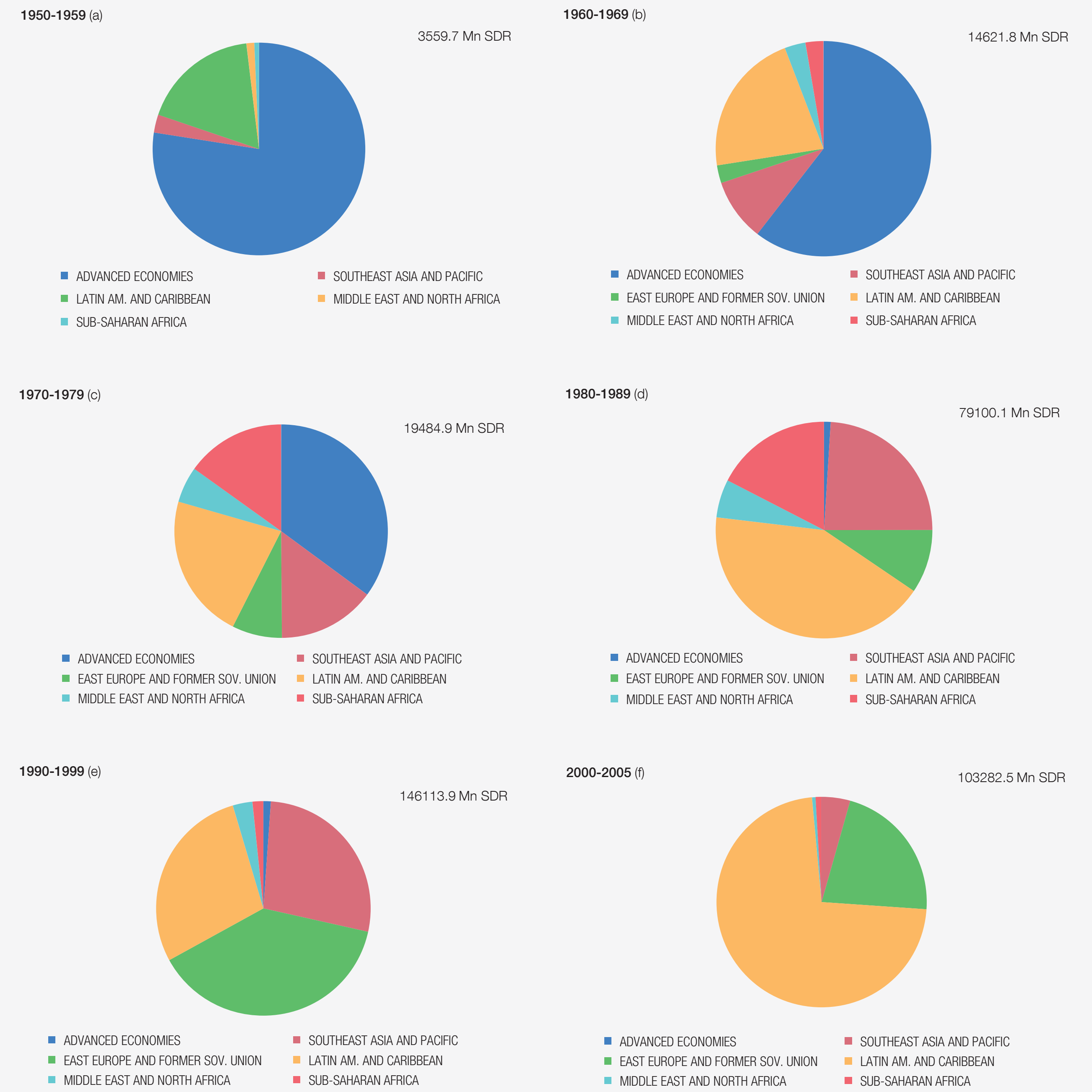
However, the lending policy ended up in an excessive proliferation of facilities, with a very high casuistic, which will introduce costs in terms of arbitration among facilities and lack of transparency. When negotiating a program, countries and the Fund staff faced a wide menu of facilities with different access limits, conditionality and financing conditions, and with choices of combining facilities (when complementary). This introduces a problem of arbitration among programs, where the country and/or the staff would argue on the kind of imbalance faced by the country, biased by the terms of the facility that offers better conditions, either by duration, cost, volume of resources, or conditionality requirements.

On the other hand, there is a problem of transparency because it makes it difficult for the market to identify the signals from each type of facility. The result is a tendency to associate IMF loans with a balance of payments crisis with a negative stigma on the economic situation of the country, without differentiating the nature of the crisis, whether exogenous or endogenous, short term or structural. The lending policy thus loses its signaling ability, limiting the role of Fund programs as catalyst of private resources.

MAJOR REGIONAL TRENDS IN LOANS FROM THE IMF 1960-2005 FIGURE 2.4

From the decade of the 1970s, there is a shift in loans from advanced to emerging economies. As noted by Bougthon (2001, p. 17-20) in advanced economies, demand begins to fall with the end of the Bretton Woods system in 1973, which allowed the exchange rate to absorb much of the balance of payments shocks. On the other hand, developing economies start to demand more resources

REGIONAL DISTRIBUTION OF LOANS: 1960-2005



SOURCE: Based on IMF data.

a Principal borrowers (% total): United Kingdom (62.2), France (11.1).
b Principal borrowers (% total): United Kingdom (40.4).
c Principal borrowers (% total): United Kingdom (20.8), Italy (7.4).
d Principal borrowers (% total): Mexico (11.4), Brazil (8.3), India (6.7).
e Principal borrowers (% total): Russian Federation (16.2), Turkey (10.7), South Korea (10.6), Mexico (10.4), Indonesia (9.4), Brazil (8.2).
f Principal borrowers (% total): Brazil (38.3), Argentina (27.2), Turkey (18.9).

from the Fund in the context of slowing growth in advanced countries (their main market). In the 1980s, with the debt crisis in Latin America, emerging economies became the first IMF borrowers.

Among emerging countries, the loan volumes have been regionally oriented following the succession of global crises: Latin America in the 1980s; Asia, Eastern Europe and Russia in the 1990s; and again Latin America in the early 21st century with the crisis in Argentina. From 2008, Europe (emerging and advanced), becomes the major borrower after the global financial crisis (see Chapter 4).

As we shall see, from the year 2000 we are witnessing a reverse trend in the direction of reducing the number of facilities. The flexibility of the Fund will not be translated in terms of activation of new facilities, but in terms of a scheme with few programs but more flexible application (i.e., not limited to a specific imbalance). In this scheme the lending policy will no longer rely in creating a new facility whenever a new non-anticipated balance of payments difficulty arises.

Structural approach to the balance of payments

Over time, the IMF incorporates on its policy making the theory that current account difficulties have a structural nature. This is reflected, not only in the creation of the EFF or the successive facilities aimed at low-income countries (ESF, ESAF, PRGF), but also in other facilities, which include growing structural conditionality since the 1980s.

This evolution of conditionality responds to changes in the underlying theoretical basis. Traditionally the IMF had been implementing the monetary approach to the balance of payments adjustment, to which the Fund had significantly contributed with its own research through the works of Jacques Polak,[15] director of research between 1958 and 1979. The monetary approach links the balance of payments imbalances to domestic credit expansion. From the 1980s there is a progressive paradigm shift with the addition of the theoretical underpinning of neoclassical economics. In particular, two central tenets: the monetarist approach to inflation of Friedman, and the introduction of market structural reforms, including liberalization and open markets and a commitment to the (more efficient) private sector (Boughton, 2001, p. 25-27 and 559).

This shift will result in a new set of policies that will shape the IMF conditionality from the late 1980s and have become known as the Washington consensus, term coined by John Williamson (1990). The consensus includes the set of policies – different sets for different authors – that are considered necessary and sufficient conditions for growth. The core policies that have focused Fund recommendations have been: fiscal and monetary stabilization, liberalization of prices and interest rates, trade liberalization and privatization. In Chapter 4 we will see how, after the global financial crisis, the Fund is building a new consensus nearest to the new Keynesian economics.

2.3 1995-2008: capital account crisis and large scale lending

From the second half of the 1990s, the balance of payments crises are manifested on the capital account rather than on the current account. Under this new scenario, the IMF tools were considered outdated and non effective. As noted by Varela and Varela (2000), the 1990's gave way to a growing market role in the international economy, marked by in-

15 Polak wrote a seminal article on the monetary approach, (1957) «Monetary Analysis of Income Formation and Payments Problems». IMF Staff Papers, Vol 6, No. 1, p. 1-50.

creasing globalization and high and rapid capital movements. In this context, crises are characterized by its suddenness, wide and rapid spread, as manifested in the succession of crises during the decade: European 1992, Mexican 1994, or Asian, Russian and Brazilian from the second half of the decade.

Faced with a capital account type of crisis, it is necessary for the country to have quick access to a large amount of resources to restore the confidence of international markets. During these years, the IMF initially responded by granting large loans between 490 and 690 percentage of the quota,[16] well above the normal limits of conventional access (300 percent) and applying the exceptional circumstances clause. Furthermore, it established in 1995 the Emergency Financing Mechanism (EFM), which allowed for quick access to Fund resources with a shorter decision procedure of the Board of just two weeks.

However, the succession of exceptional access programs led to a situation that required changes. The IMF responded by (a) creating two new facilities specifically designed for the capital account, the Supplemental Reserve Facility (SRF) and the Contingent Credit Lines (CCL); and (b) establishing a special framework to formalize access to resources beyond their normal limits. These changes constitute the embryo of the two major reforms later introduced in 2009: the insurance function of the IMF and the expansion of the access limits.

Facilities for capital account difficulties: SRF and CCL

On December 17, 1997, the IMF approved the Supplemental Reserve Facility (SRF) in the middle of the Asian financial crisis. Two weeks earlier, on December 4 a record loan had been granted to South Korea, a SBA amounting to 1,938% of its quota, which is partially reconverted in the first SRF.

The SRF was designed to cover exceptional capital account difficulties. It offered short term access to a large amount of resources, to deal with sudden loss of confidence in the international markets. This access is additional to what the country was getting through another program (usually a SBA or an EFF). Repurchases were set between one year and 18 months, renewable one year, and the types were determined by the program to which it is attached, plus a spread based on its maturity. The SRF had no predetermined access limit; it was to be determined by the specific needs of the country and the Fund's liquidity position. Therefore, the Fund sent a message to the markets of non-capped possibility of assistance.

Later, in April 1999, the CCL was activated. Unlike the SRF – designed to deal with ongoing crisis – the CCL was conceived as an assurance to avoid the transmission to third countries that often occurs in capital account crises, because of the distrust installed in the markets. The CCL was intended to support those most vulnerable countries, signaling the willingness of the IMF to support them and thereby mitigate the possibility of contagion.

Regarding access conditions, no general access limit was established, however there was a presumption that the loans would oscillate between 300% and 500% of quota. The funds would be awarded for one year and repurchases, between 12 and 18 months from the date of each disbursement. After much critique on the usefulness of the CCL with its original design, especially from emerging economies (the intended costumer), the facility was amended in 2000 in order to make it more attractive. It introduced an automatic access to the first tranche of the loan and interest rates below the SRF (the surcharge was limited to a maximum of 350, compared to 500 of the SRF).

To access the CCL the country was required to have sound macroeconomic fundamentals according with certain qualifying criteria focused on four conditions: (1) no need for IMF resources, i.e. the need to use IMF financing is only due to contagion, and not to

16 Including those granted to Mexico, Thailand, Indonesia and South Korea between 1995 and 1997.

domestic policies of the country, (2) positive evaluation of the country's policies and progress in the observance of international standards, (3) constructive relations with private creditors and progress in limiting external vulnerability, and (4) a satisfactory macroeconomic and financial program (IMF, 2004a).

Yet, the CCL generated significant problems in terms of negative stigma. On one hand, there were difficulties in distinguishing the CCL from other IMF facilities, with the risk that subscribing the line were interpreted as the existence of a problem (more than insurance against contagion); and thereby, causing the opposite to the intended effect, that is, triggering the capital account crisis it was trying to avoid. On the other hand, there was also a problem of negative signals depending on whether or not the eligibility criteria were met. In this regard, it was attempted to establish a list of countries eligible for the CCL and avoid the qualification process, but then appeared a negative stigma for countries excluded from the list.[17] The line also posed a problem of uncertainty as to their availability, because the disbursement of resources required in any case the approval of the Board.

The result was that the CCL became extinct in 2003, without ever being used. However, as noted by Bustelo (2000), the CCL introduced two new features with respect to traditional Fund facilities: they are to be subscribed without a context of crisis, and intended for countries with strong fundamentals.[18] As discussed in Chapter 5, these two new features are at the heart of the new insurance facility that activates the IMF from 2009, the Flexible Credit Line. The CCL and the mistakes learned by their lack of use, are the necessary precedent for the subsequent establishment of the FCL and with it, the establishment of a new role as insurer for the IMF.

The exceptional access framework

In 1994 the IMF set normal annual access limits to loans in 100% of quota, and cumulative access in 300%, although the Board retained the power to grant loans for higher amounts. Given the high volume of resources required in the resolution of capital account crises of the late 1990s, the Fund provided loans those years by amounts exceeding normal limits. To this end, two routes were used: the exceptional circumstances clause[19] or the new SRF (1997), which did not incorporate access limits.

The result is that in the period 1995-2002, the IMF's financial exposure was concentrated in a small number of programs with exceptional access. Eleven countries with capital account crisis on this period concentrated loans totaling SDR 124,800 million (see Figure 2.5).

Given the lack of a clear definition of the "exceptional circumstances", in September 2002, the IMF approved a new framework to formalize and provide more predictability on the conditions for the granting of loans exceeding normal limits. The new framework for exceptional access established four conditions:

(1) The country faces an exceptional capital account imbalance that cannot be covered with normal funding limits.
(2) High likelihood of debt sustainability based on a rigorous analysis.
(3) The country has good prospects of regaining access to private capital markets in the period in which the loan is granted.
(4) Reasonable prospects of success of the program both because its content and the political and institutional capacity to implement it.

17 Chapter 3 deals with the problems of stigma and signaling, including the CCL.
18 Díaz-Cassou, Fernández and Fernández de Lis (2006) analyzed the gap in the facilities of the IMF in the absence of signaling or insurance instruments once the CCL was canceled.
19 This clause had been born a decade earlier during the debt crisis in Latin America.

EXCEPTIONAL ACCESS PROGRAMS 1995-2002 FIGURE 2.5

Country	Year	Program	Amount		
			SDR million	% quota	% GDP
Mexico	1995	SBA	12,100	688	4
Thailand	1997	SBA	2,900	505	2
Indonesia	1997	SBA	7,300	490	5
South Korea	1997	SBA/SRF	15,500	1,938	4
Russia	1998	SBA/SRF/CCFF	15,400	356	5
Brazil	1998	SBA/SRF	13,000	600	2
Turkey	2001	SBA/SRF	15,000	1,560	10
Argentina	2001	SBA/SRF	16,900	800	8
Brazil	2001	SBA/SRF	12,100	400	3
Turkey	2002	SBA	12,800	1,330	11
Uruguay	2002	SBA/SRF	1,800	571	9

SOURCE: IMF (2004b).

The framework also provided improved procedures with greater involvement of the Board that must be consulted through informal and confidential meetings,[20] and ex post evaluations before the year after completion of the program (IMF, 2004b). The framework will also be renovated in the 2009 reform, clarifying the criteria, and extending the exceptional access to any balance of payments difficulty, including precautionary access.

2.4 Resources: reaching one trillion USD (and growing)

The reform of the lending policy in 2009 was accompanied by a tripling of the Fund resources decided on the G20 summit in London in April of that year. The G20 endorsed the new lending policy by providing the necessary resources to carry it out. As we will see, the implementation of this increase will be more complex and will take place in various steps, initially with bilateral loans and issuance of SDRs, later with the New Arrangements to Borrow (NAB), and finally, increasing quotas. Japan and the European Union will be the first countries to advance resources.

Generally, the increase of the Fund resources is done by increasing the quotas of member countries that should be revised at least every five years. As discussed in Chapter 4, when analyzing the governance of the Fund, between 1950 and 2010 fourteen General Reviews of Quotas (GRQ) took place. In nine of them quota increases were between 30 and 50 per cent of the previous quota, and the last one in 2010, 100 percent (see Figure 4.5 in Chapter 4).

In these years, the total IMF quota is multiplied by more than 5,000 percent to reach SDR 477,000 million after the 2010 increase; which nonetheless has yet to be ratified (expected for 2013/14). Alongside with quotas there will also be SDR 182,400 million available through the NAB, for an approximate total of 660,000 million SDR (about US$ 1 trillion). In December 2011, the countries of the euro announced additional contributions of € 150,000 million (SDR 127,000 million) in form of bilateral loans, which will later be enlarged in 2012 with new commitments from most G20 countries totaling about US$ 460,000 million of additional bilateral resources, albeit of a temporary nature.

20 The meetings are restricted with the assistance of 24 directors. Numbered notes are distributed to each Director to be taken back before the end of the meeting.

In general, the quota increases have provided the Fund with sufficient resources to offer the new policy instruments developed over time. However, there have been temporary imbalances that have demanded to habilitate additional funding to meet specific needs. These bilateral contributions have their precedent in the ad hoc funding sources established in the 1960s (trust funds and loan agreements). Here, it is interesting to discuss on: (a) the adequacy of Fund resources; and (b) its main sources outside the quotas.[21]

A THE ADEQUACY OF IMF RESOURCES

Traditionally, the adequacy of IMF resources was analyzed in terms of the relationship with international economic variables such as trade flows or global GDP, as a proxy for the potential needs of member countries in crisis. Since the 1990s, with the exponential growth of international capital flows, there was some consensus that IMF resources had fallen short to the new challenges of a global economy much more interconnected and in which the countries are subject to capital account crises. In 1990, with international capital flows estimated at US$ 171,000 million, the IMF had a lending capacity of US$ 36,000 million, while in 2008, the annual lending capacity of the IMF was US$ 200,000 million,[22] compared to international flows of US$ 3 billion, i.e. the ratio resources/capital flows fell from 21 to 6 percent (Mallaby, 2008). Indeed, as shown in Figure 2.6, in 2008 the IMF had decreased in size in relation to various indicators of the global economy (IMF, 2009c).

Between the 1980s and mid-1990s, despite the successive quota increases in the GRQs VII to IX, the highest relative growth of the economy and world trade brings down the relative size of the Fund with respect to GDP and global trade. The quota increase in the XI Review had allowed to correct the weight loss of the Fund, but it will fall back thereafter in a context of global growth with no quota increases. In 2008, the relative size of the IMF with respect to GDP and world trade fell to record lows, the ad hoc quota increases of 2006-2008 allowed only marginally to correct the situation (see Figure 2.6).

The weight loss of the IMF relative to international capital flows is much more significant. This ratio experiences a continued decline despite the successive quota increases, because of the exponential growth of international capital movements from the 1990s. Again, the ad hoc quota increases in 2006-2008 allowed only to marginally correct this situation.

In 2010, considering the size of the IMF quota that would correspond with the doubling of quotas approved by the Board in November,[23] yet to be ratified (dashed lines of Figure 2.6); the IMF would be at higher levels than in 1998 by reference to GDP and capital flows, and somewhat less in the case of trade, in this case due to improved recovery of trade flows with respect to capital flows and global growth during the crisis period 2008-2010.

In the debate on the resource adequacy, since early 2009 (IMF, 2009c) the Fund itself points to the need to increase its resources and remits to the valuations of various authors who consider the needs of the Fund from at least US$ 1 trillion (Johnson, 2008) to unlimited amounts as suggested by Calvo (2009), proposing a role of lender of last resort for the IMF. Finally, the G20 will choose to triple IMF resources in the April 2009 summit in London.

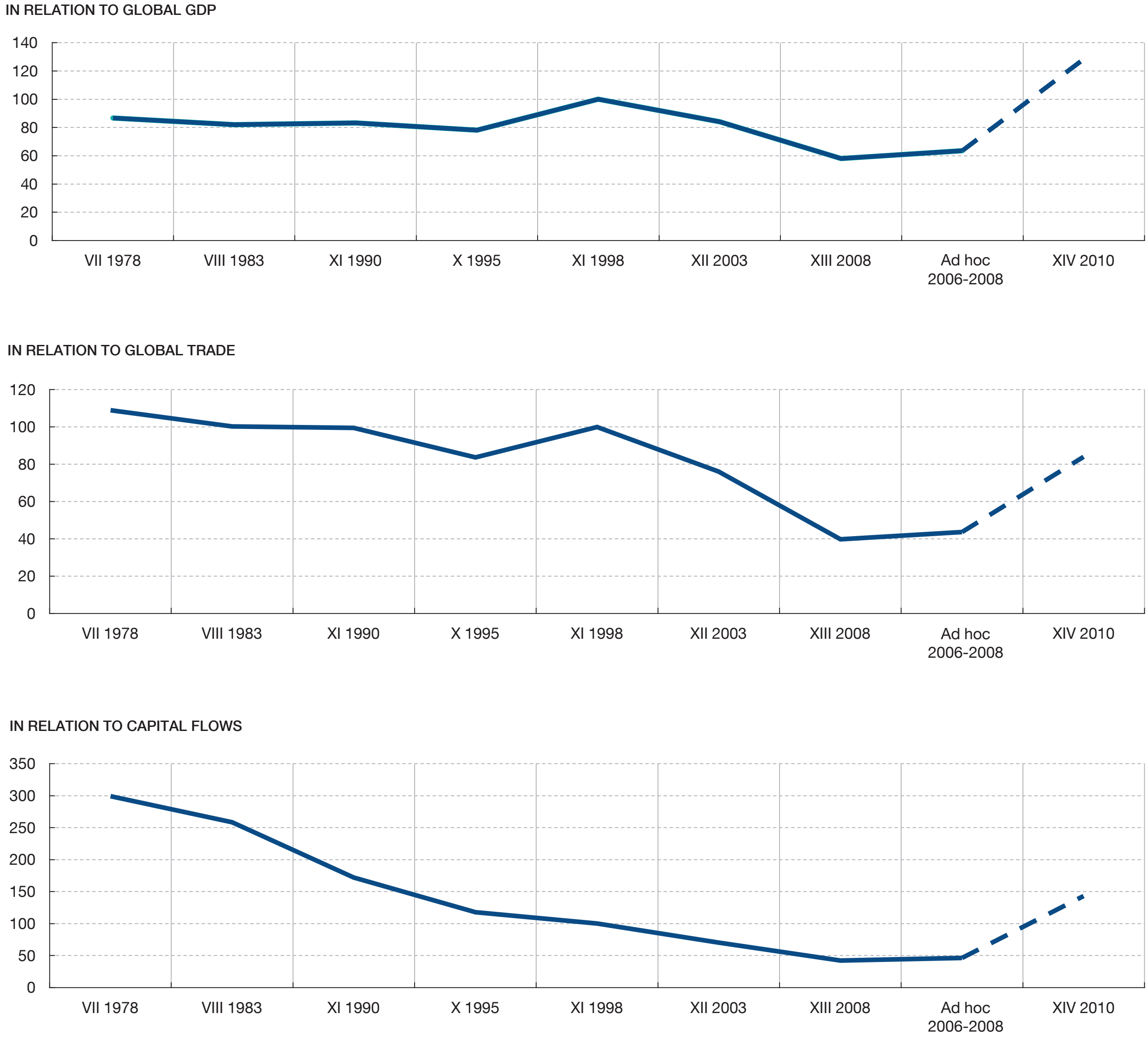
21 The discussion on quotas is dealt in Chapter 4 when dealing with governance due to the dual nature of quotas as both, determinant of IMF resources, and the country's access to Fund resources; and the countries voting shares.

22 The lending capacity of the IMF in a year is determined by: the resources approved in Financial Transactions Plan (FTP), plus the SDR holdings, less resources committed to outstanding loans (whether or not paid and net of reimbursements planned for the year ahead), less the precautionary balance (set at 20% share of the countries included in the FTP). The FTP is approved every three months and determines the resources from quotas the IMF can use to fund their loans. It includes contributions from countries that are deemed firm enough, mostly advanced and emerging economies, but also developing economies. The quota resources from countries not included in the FTP (e.g. quotas from countries with IMF programs) are not considered lendable resources.

23 In November 2010 was approved the doubling of quotas, i.e., increase of SDR 238,400 million. See Chapter 4.

RELATIVE SIZE OF THE IMF MEASURED BY TOTAL QUOTA: 1978-2010
(Index 1998=100)

FIGURE 2.6



SOURCE: IMF.

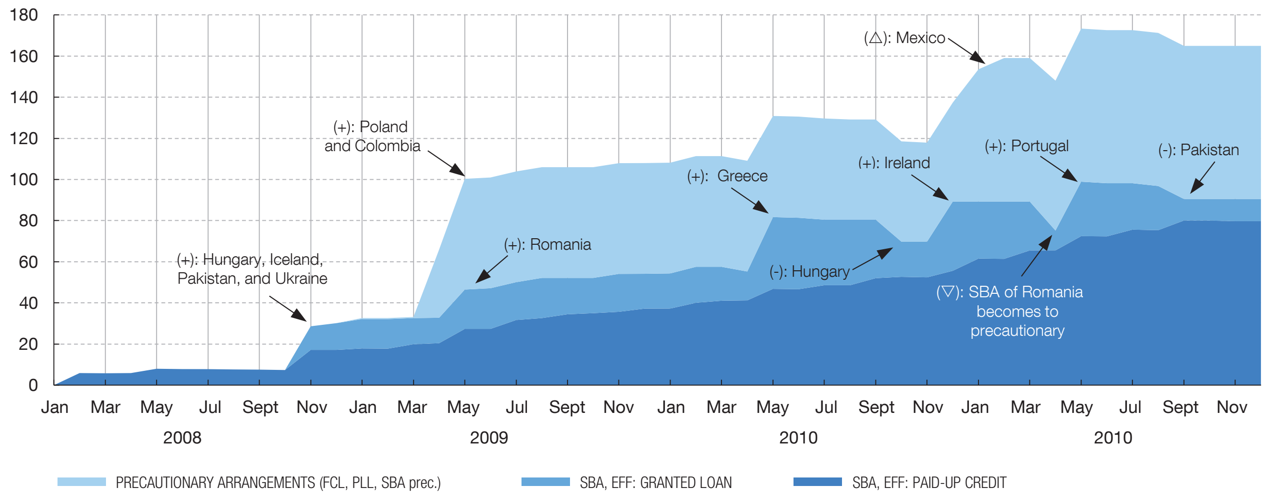
It should be noted that before the start of the crisis in 2007, the IMF had been at historic low levels of outstanding loans, totaling about SDR 10,000 million. The lending capacity of the IMF had been at record highs of SDR 128,000 million (about US$ 200,000 million dollars) after Brazil and Argentina decided to repay all of its loans in late 2005. However, since end-2008 the Fund begins to address a growing demand for loans as a result of the crisis. Between 2008 and 2011 the Fund scales up its lending to around SDR 170,000 million (about US$ 280,000 million),[24] of which about 70,000 million granted under the new precautionary facility, the FCL (see Figure 2.7 and also Figure 5.5 in Chapter 5).

Actually, at the beginning of the global financial crisis, the IMF surpassed the lending capacity at its disposal in December 2007. The bilateral loans subscribed between 2009 and 2010, especially the US$ 100,000 million provided by Japan and the US$ 57,000 million from the EU, have allowed to maintain the Fund's lending capacity over these years.

24 There are also a number of programs that expire during this time period, amounting up to around US$ 50,000 million.

IMF LOANS: 2008-2011
(SDR million)

FIGURE 2.7



SOURCE: Based on IMF data.
NOTE: (+): new program. (-): finalization of the program. (△): increase in the amount of the program. (▽): reduction in the amount of the program.

B THE MAIN SOURCES OF RESOURCES OUTSIDE THE QUOTAS: ENGINEERING THE TRIPLING [+] OF RESOURCES 2009-2010

At the London Summit in April 2009, the G20 supported a significant expansion of multilateral resources estimated at US$ 1.1 trillion distributed as follows: up to US$ 500,000 million in bilateral contributions to the IMF,[25] an increase of US$ 100,000 million (over a three year period) in the volume of loans granted by multilateral development banks, a global effort to mobilize up to US$ 250,000 million to finance international trade (including mobilization of US$ 50,000 million through the International Finance Corporation of the World Bank), and an extraordinary allocation of SDRs worth US$ 250,000 million[26] (Moreno, 2009).

The contribution of US$ 500,000 million to the Fund, which eventually would reach nearly US$ 600,000 in contributions to the NAB, represented a tripling of the maximum available resources for loans that the Fund had reached in 2007 (US$ 200,000 million dollars in TFP, and the additional US$ 50,000 million available through the NAB/GAB arrangements).

Following the Summit, the IMF Board and the NAB member countries entered a complex technical debate on how to formalize these new commitments. A sequential process was improvised with overlapping periods: approval of bilateral loans and Note Purchase Agreements (NPAs) between 2009 and 2010; approval of the expanded NAB in 2010 and ratification in March 2011, and approval of the doubling of quotas in 2010 with ratification expected in 2013/14. Countries will transfer their contributions from one to another source, from bilateral agreements to NAB and, from NAB to quota increases, as the corresponding ratifying processes requiring parliamentary approval in most member countries are formalized (see Figure 2.8). Further, in 2012, the G20 fostered a new bilateral round of temporary loans to the IMF for an addition of SDR 305 bn, raising the Fund's total resources up to SDR 965 bn (aprox. US$ 1.5 tn).

25 Additionally there was a commitment to increase in six billion the Fund's concessional financing.
26 The use of SDRs is recovered after being sided for almost 30 years. The first issue of SDRs is distributed in 1970-1972 (SDR 9,300 million) and the second at 1979-1981 (SDR 12,100 million). In 1997, the fourth amendment established the SDR duplication (additional SDR 21,400 million), but it was not approved by the US Congress. This new emission amounts up to SDR 167,000 million (US$ 250,000 million).

INCREASE OF IMF RESOURCES 2008-2013. **FIGURE 2.8**
IMF. General resources account (GRA). Owned and borrowed resources.

All data in millions

		2008		2009		2010		2011		2012		2013-2014 (a)	
		USD	SDR	USD	SDR	USD	SDR	USD	SDR	USD	SDR	USD	SDR
Owned resources													
Quotas		326,059	217,373	326,059	217,373	326,148	217,432	356,034	237,356	357,175	238,116	714,348	476,232
Borrowed resources													
Permanent funds													
NAB arrangements	Original NAB	51,000	34,000	51,000	34,000	51,000	34,000					NAB rollbacks into quotas	
	Enlarged NAB							544,871	363,247	554,996	369,997		
	After roll-back											273,557	182,371
Temporary funds													
Bilateral loans & NPAs	1st round (2009/10)			218,972	167,879	270,414	207,318	Folding-in into NAB					
	2nd round (2012/13)												
TOTAL RESOURCES		377,059	251,373	596,031	397,354	647,562	431,708	900,904	600,603	912,170	795,046	1,448.905	965,936
	Not including 2nd round of bilateral loans (i.e. more "permanent" quota and NAB resources)											987,905	658,603

SOURCE: IRC-TFIMF (2013).

a Pending ratification of quota increase and second round of bilateral loans and NPAs.

In short, given the difficulty in terms of time it takes to approve quota increases, the Fund articulated flexible and transitional mechanisms (bilateral loans/NPAs and NAB), to maintain the adequacy of its resources. This same type of solutions have been used by the IMF in the past and have their main precedent in the GAB arrangements in the 1960s, or the trust funds in the 1970/1980s (see Figure 2.9).

Bilateral loans and NPAs

The growing demand for programs since the end 2008 creates an urgent need for IMF resources. Throughout 2009 and 2010 a group of 21 countries, led by Japan with a first contribution in February 2009,[27] chose to sign either bilateral loans or purchases of IMF notes (Note Purchase Agreements or NPAs), for an approximate value of US$ 241,500 million (see Figure 2.10).

The 18 contributing advanced economies chose to do so through bilateral loans, which have their precedent in the contributions through trust funds to finance development. Although different in nature, the trust funds opened a line of bilateral funding to the IMF more flexible than the GAB and NAB, because they represent voluntary contributions from each country that do not require majorities to be activated. Unlike trust funds, bilateral loans are not grouped; they maintain their bilateral character and, instead of financing development, they are linked to conventional IMF loans under the General Resources Account.

Meanwhile, the three emerging economies opted for NPAs, so as to treat their contributions as investments within their reserves management policy.[28] These two types of contributions have the advantage (unlike the NAB) that, once signed, they immediately become part of the lending capacity of the IMF, adding to the resources of the Financial Transactions Plan (TFP).[29] The amount undisbursed of ongoing loans is part of the Fund's one-year Forward Commitment Capacity (FCC).

27 Historically, Japan has maintained a strong commitment to multilateralism that has placed it in the top positions for financial contribution to the multilateral financial institutions. Its early bilateral contributions to the IMF in the midst of the global financial crisis is one more example.

28 The IMF had to approve an ad hoc framework in July 2009 for issuing NPAs to the official sector that was the preferred choice by emerging countries.

29 See footnote 21.

Arrangements to borrow (GAB/NAB). The General Arrangements to Borrow (GAB) were created in 1962 to strengthen the capacity of IMF loans. The IMF signed an agreement with 10 industrialized countries,[1] which would form the G10. They opened credit lines in favor of the IMF in their own domestic currency to cover possible commitments of the IMF to a GAB's member facing balance of payments difficulties, or to third countries under certain circumstances. In 1983, under the pressure of the Latin American debt crisis on IMF´s resources, the GAB resources were expanded from SDR 6,000 to 17,000 million and the financing of third countries was authorized in case the IMF own resources were insufficient. That year, Switzerland joined in GAB (providing SDR 1,020 millions) despite not being an IMF member (it joined in 1992);[2] and Saudi Arabia contributed with an additional SDR 1,500 millions in a parallel bilateral agreement.

Later on, following the Mexican and Asian crisis in the 1990s, the G7 drove a new extension of resources. In 1998, the decision of establishing the New Arrangements to Borrow (NAB) was adopted, providing additional SDR 34,000 millions (around US$ 50,000 millions). Both the G10 countries, and other 15 countries joined bringing the total to 26[3] (IMF, 2010d). The contribution of each country is related to its economic strength and its IMF's quota.

The agreements to borrow could be activated sequentially (first the NAB and then the GAB) in circumstances of IMF illiquidity, when it needs to supplement its quota resources. Until the reform in 2011, its activation was very strict because it would require the approval of 80% of its members (unanimity in the case of the GAB), and because it was activated individually for each IMF loan for which additional resources are needed (this will be reviewed in 2010, with activation periods of six months not limited to a specific loan or country). In practice, the GAB only has been activated ten times – the last time in 1998 in relation to a loan to Russia – and before 2011, the NAB had only been activated once, in December of 1998, to finance a SBA to Brazil.

Trust Funds. In 1975, the IMF started its concessional support through bilateral contributions managed through trust funds, with the subsidy account of US$ 190 millions, within the first Oil facility. In 1976, in a context of high interest rates, a new fund with SDR 3,000 millions was activated, with contributions by 14 countries in order to grant credits to low income countries with a concessionality element. They financed first tranche (25% of quota) loans that only required demonstrating existence of balance of payments needs and reasonable effort to correct it.

The problem was that, at the beginning of the 1980s, the IMF was approving loans to developing countries through two ways: conventional programs with conditionality, and loans through the trust fund without conditionality. This opened a discussion about the consolidation of loans for low income countries around one concessional facility, but with a conditionality that would turn out to be the birth of the SAF in 1986 (Boughton, 2001 p. 639-640).

The trust funds were extended successively with increasing resources, number of funds, and contributor countries, linked to specific facilities for low income countries, including for example funds associated with the ESF, with the PRGF, or the HIPC and the MDRI initiatives. In general, there are two accounts for each fund, a capital account, which finances the principal of the loans with no concessionality; and a subsidy account, which finances the interest rate's concessionality.[4] Between 1998 and 2008 the total committed resources reached the amount of SDR 17,700 million and 4,700 millions, in the capital and subsidy accounts respectively. The majority of these contributions were made by 27 advanced economies (94% in the case of capital accounts and 88% on the resources for subsidies), with additional contributions by up to 58 emerging and developing countries. In these years, they funded up to 179 programs for low income countries (IMF, 2009b).

In 2009, in line with the lending policy reform, the IMF initiated the restructuring of trust funds encompassing them under only one framework, the Poverty Reduction and Growth Trust (PRGT), which includes four capital accounts and five subsidy accounts. The IMF initiated a round of new contributions with the 2014 horizon and the aim of raising SDR 10,800 and 1,500 millions, on loan and subsidy resources respectively.[5] The IMF estimates loans' demands for low income countries in the amount of SDR 11,400 millions between 2009 and 2014 (IMF, 2010e). As of March 2013, the PRGT had raised SDR 9,800 millions in loan resources and SDR 200 in the subsidy account, to which it should be added additional SDR 2,450[6] subsidy resources from the benefits of gold sales by the IMF.

1 Belgium, Canada, France, Germany, Italy, Japan, Netherlands, United Kingdom, United States, and Sweden.
2 Switzerland is associated with the G10 in 1964 but did not acquire full membership until 1983.
3 G10 countries plus: Saudi Arabia, Australia, Austria, Chile (since 2002), Denmark, Spain, Finland, Hong Kong, South Korea, Kuwait, Luxembourg, Malaysia, Norway, Singapore, and Thailand. In 2010 14 new members will join (see next section on the expanded NAB).
4 In many cases, the central banks of the country contribute to the capital account and governments to subsidy account.
5 With a menu of options, including new grants, funds from the sale of gold and using part of the funds accumulated in the PRGT.
6 Of these, SDR 700 million are approved in 2012 and a second round of additional SDR 1,750 million are expected to be approved in 2013.

BILATERAL AGREEMENTS SUBSCRIBED BY THE IMF (2009-2010) FIGURE 2.10

Country	US$ billion
Bilateral loans	
Japan	100
European Union	**82.5**
Canada	10
Norway	4.5
TOTAL	**197**
Note Purchase Agreements (NPAs)	
China	50
Brazil	10
India	10
TOTAL	**70**

Country	€ billion
EU €61,880 million (aprox. US$ 82,500 million)	
Germany	15
France	11
UK	11
Netherlands	5.31
Belgium	4.74
Spain	4
Sweden	2.47
Austria	2.18
Denmark	1.95
Finland	1.3
Portugal	1.06
Czech Republic	1.03
Slovakia	0.440
Slovenia	0.28
Malta	0.120

SOURCE: Based on IMF data.
NOTE: Third countries make additional commitments formalized after 2010 and/or through the NAB (US$ billions), including: Australia (5.7), Chile (1.6), Italy (10.8), Russia (10 NPA), South Korea (10), Switzerland (10), Singapore (1.5), and USA (100 for the NAB).

Bilateral agreements have helped sustain the lending capacity of the IMF between 2008 and 2010. As shown in Figure 2.11, from record highs in 2007, the lending capacity one year later falls because of the programs granted in the fall of 2008, especially to Eastern European countries. However, in 2009 the lending capacity is recovered despite a strong increase in new loans of over SDR 100,000 million. This is due to the succession of bilateral agreements signed during 2009. In 2010 it falls back due to new large loans, most notably those given to Greece (May) and Ireland (December).

From April 2011, the lending capacity has been sustained through the NAB once the Board approved its first activation worth SDR 211,000 million, and the subsequent renewal of the activation every six months since then.[30] These activations have kept the IMF lending capacity around SDR 240,000 million in 2011 and 2012. On a more technical note, bilateral agreements were supposed to revert to the expanded NAB once it was ratified. However, they have remained temporarily open because of legal and liquidity problems arising from the temporal coordination between the cancellation procedure of bilateral loans (and all the programs they funded), and the parallel activation of the expanded NAB.[31] During these years the IMF is rebalancing the distribution of loans among the countries participating in the FTP[32] by way of asking fewer resources via quota or NAB

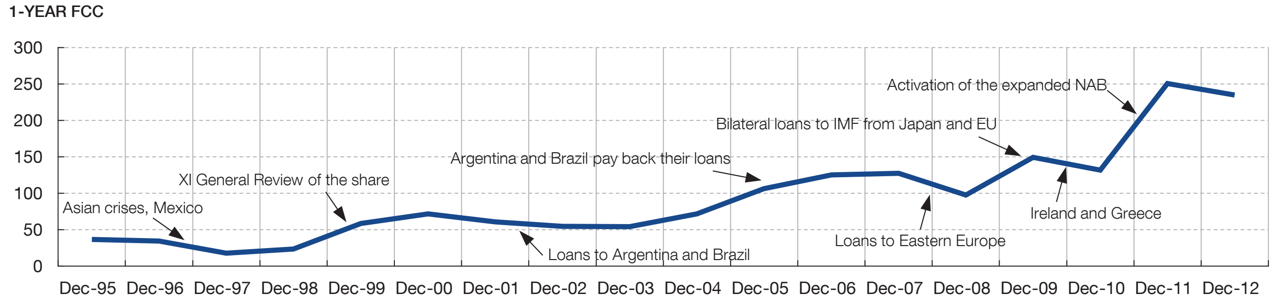
30 The new NAB became effective on March 11, 2011 (once ratified by member countries); and was activated for the first time on April 1 for a maximum amount of SDR 211,000 million. The activation process is a separate legal act adopted every six-month periods – if it is judged that the IMF needs extraordinary resources –.

31 This temporary solution has generated much technical debate in the IMF and criticism to the staff for not anticipating the legal and liquidity problems when the Board expanded the NAB in April 2010, which were uncovered only six months later. This gives an idea of the degree of improvisation demanded so that the IMF could absorb in such a short period of time to triple its lending capacity. Other evidence is the two ECOFIN decisions to fix the European contribution, one in March 2009 at € 75,000 million, and another in September, for € 50,000 additional million.

32 The countries included in the FTP approved November 1, 2010 include: Algeria, Australia, Austria, Belgium, Botswana, Brazil, Brunei Darussalam, Canada, Chile, China, Colombia, Cyprus, Czech Republic, Denmark, Finland, France, India, Ireland, Israel, Italy, Japan, South Korea, Kuwait, Libya, Luxembourg, Malaysia, Malta, Mauritania, Mexico, New Zealand, Norway, Oman, the Netherlands, Peru, Poland, Portugal, Qatar, Russia, Saudi Arabia, Singapore, Slovakia, Slovenia, Spain, United Kingdom, United States, Sweden, Switzerland, Thailand, Tunisia and Uruguay.

IMF's 1-YEAR FORWARD COMMITMENT CAPACITY
(million SDR)

FIGURE 2.11



SOURCE: Based on IMF data.

to the countries with bilateral agreements already in use. The Fund also assumes the commitment that the sum of resources used via bilateral loans and the NAB shall not exceed the total commitment made at the NAB by the country.

The expanded NAB

In 2009, while certain countries were signing bilateral loans, the G20 urged parallel expansion of the NAB, which was the preferred option for the G20 itself and especially by the US, where the Congress passed in June 2009 a contribution of up to 100,000 million to the IMF through the NAB. Members reach an extension agreement in November 2009 in the amount of US$ 530,000 million, multiplying almost by 10 the previous NAB and slightly surpassing the half-billion target set by the G20. The Board approved the expanded NAB in April 2010, and it was finally ratified by member countries in March 2011.

The enlarged NAB has total resources of about SDR 370,000 million[33] (approximately US$ 588,500 million), however, this amount will be reduced from 2013/14, when a major part of the resources of the new NAB will be transferred to the quota increases (once this are ratified). Specifically, it is expected that the NAB will remain with total resources of SDR 182,400 million (IMF, 2011).

This transfer has a very important formal connotation, because the Fund will recover its character of a quota-based institution. As it was emphasized by the International Monetary and Financial Committee (IMFC) at the Annual Meetings of the Fund in October 2010, the quota reform is essential to the legitimacy and effectiveness of the Fund, which is and should be an institution based in quotas. At least temporarily, in the period 2011-2013/14, available resources (not necessarily used) via NAB, will exceed those obtainable by quotas.

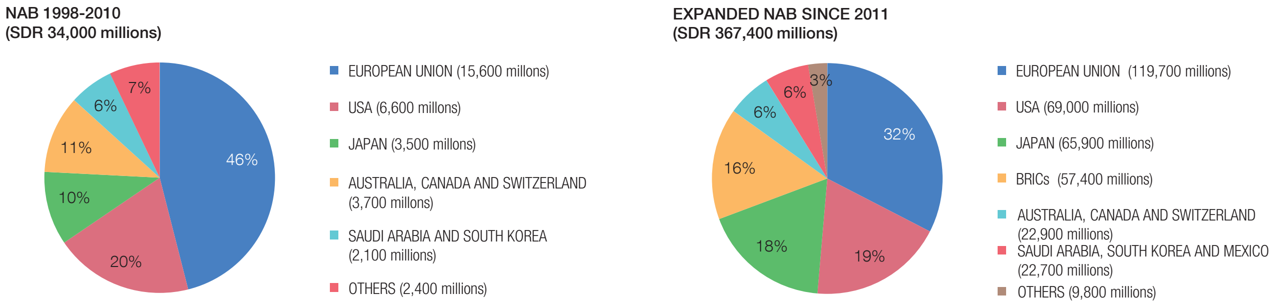
The NAB enlargement has taken place, both through the expansion of the contributions of the 26 countries that were already members, and by the contributions of 14 new members.[34] The contribution of each country bears a certain relation to its quota weight but not an exact one, because not all IMF members are NAB members, and the levels of commitment differ (especially in the case of Japan, with a 6.5% share in the IMF and a contribution to the NAB which is 18%).[35]

33 Initially with SDR 367,400 million in March 2011, to which are added 2,500 million of Poland's contribution, incorporated as a new NAB member in November 2011.

34 Former NAB members: Australia, Austria, Belgium, Canada, Chile, Denmark, Finland, France, Germany, Hong Kong, Italy, Japan, South Korea, Kuwait, Luxembourg, Malaysia, Norway, Netherlands, United Kingdom, United States, Singapore, Spain, Sweden, Switzerland and Thailand. New members from 2011: Brazil, China, Cyprus, India, Israel, Mexico, New Zealand, Philippines, Poland, Portugal, Russia, and South Africa. Greece and Ireland have yet to adhere by end 2012.

35 The countries have the right to make a withdrawal from their contributions to NAB if they have balance of payments problems, allowing these contributions to be considered as reserves.

CONTRIBUTIONS TO THE NAB AND THE EXPANDED NAB (Nov. 2011) FIGURE 2.12



SOURCE: Based on IMF data.

Classifying by groups of countries, contributions to the expanded NAB reflect the new balance of power in the NIEO. As shown in Figure 2.12, emerging economies gain outstanding weight at NAB, many of which are new entrants (BRIC countries, Mexico, the Philippines and South Africa).

Before its enlargement, the presence of emerging economies in the NAB was marginal, with the exception of the contribution of Saudi Arabia (SDR 1,760 million), in line with its traditional strong presence in the IMF. The expanded NAB incorporates these economies with strong weight including a coordinated contribution among the four BRIC[36] countries, which together place their contribution at the level of the US and Japan. Emerging economies assume a new role as leading creditors to the IMF, compared to its traditional role as borrowers.

In addition to expanding its resources, the NAB reform has introduced two new elements that make its operations more flexible: (i) possibility to finance any type of programs, including insurance facilities; and (ii) temporal activation for periods of six months, instead of the previous requirement of activation for each loan; this will allow a fast response in a context of a crisis with contagion to more than one country, since it will not require authorizations for each program. This added flexibility is compensated by increasing the qualified majority to approve activations from 80 to 85%; which gives veto power to the BRIC countries (besides the US, Japan and the EU).[37]

While the activation of the NAB since April 2011 raised the IMF's lending capacity up to 250,000 million SDR in late 2011. The aggravation of the debt crisis in Europe in 2011 and 2012 has brought about the debate for the need of additional resources. In this context, in December 2011 the countries of the euro area took the initiative to announce additional European contributions of € 150,000 million (SDR 127,000 million) in the form of bilateral loans, which would be later supplemented with additional contributions from G20 countries announced at Los Cabos Summit in June 2012. In total, contributions will amount up to approximately US$ 460,000 million of additional temporary bilateral resources for the Fund.

36 China contributes US$ 50,000 million; Brazil, India and Russia, with US$ 14,000 million each. These three countries raised unexpectedly their initially planned contribution of US$ 10,000 million, thereby increasing their weight in the NAB.

37 The 85% threshold is also used to admit new members at any point in time (previously it was only possible with the occasion of the renewals of the NAB with an 80% vote. This procedure is used for the first time in November 2011 with the incorporation of Poland.

Through 2013 the Fund will work on the adequacy of IMF resources, in view of the XVth GRQs expected for January 2014. Chapter 5 discusses this issue, here it is important to signal two aspects: (i) the increase in regular resources, i.e. via quotas, is directly linked to corporate governance (and subject to majority vote of 85%), limiting this alternative, at least in the case of short term needs; (ii) the Fund has demonstrated speed and flexibility to articulate alternative ways of financing such as trust funds or bilateral loans (which require only a simple majority). The history of sustaining the Fund between 2009 and 2011 is a good example of this flexibility. Probably, it will be the second type of solution which will be articulated again in the future if resources are needed again.

> Given any rule, however "fundamental" or "necessary" for science, there are always circumstances when it is advisable not only to ignore the rule, but to adopt its opposite. *(Feyerabend, 1975, p.23).*

Countries have faced during the crisis serious problems of illiquidity and the risk of sudden stop in the capital markets. As we saw in the first chapter, the revival of the credit market has required massive injections of liquidity into the system. The first source are the market operations of central banks, but this option is limited when the liquidity problems are in hard currencies, and the country has limited foreign reserves.

Given these risks, the first line of defense is a policy framework of sound macroeconomic, regulatory and supervisory policies to limit the magnitude of macroeconomic and financial sector imbalances. This stability can generate enough confidence in the country's economy and give leeway against capital account shocks. Now, despite having good fundamentals, countries are not immune to exogenous shocks and the G20 has recognized the need for mechanisms to ensure the availability of foreign currency. The crisis has shown that the economic and financial globalization had taken place without the development of insurance instruments (safety nets) that enable countries to hedge against balance of payments liquidity risks.

In this context, the question arises on how to strengthen the international monetary system with public insurance[1] and the role to be played by the IMF. In general, a risk may be covered by two types of strategies: self-insurance or insurance from third parties. In a similar way, given the risk of foreign currency illiquidity, countries may choose to self-insure themselves through the accumulation of reserves, or the assurance with others through what is known as Global Financial Safety Nets (GFSN; Figure 3.1 shows various sources of these kind of resources). In recent years, GFSN have been boosted at different levels: bilateral (currency swaps, bilateral loans), regional (regional funds), or multilateral (IMF insurance function).

Specifically, the Fund has developed a new insurance function through the creation of two new facilities, the FCL and the PLL. Looking ahead, there are debates on the convenience that the Fund provides long-term insurance, and on how to improve the efficiency of the whole GFSN through better coordination among the bilateral, regional and multilateral layers. In this sense, it is important to analyze the costs and benefits of different GFSN and its respective comparative advantages.

This chapter analyzes the main economic determinants behind these insurance strategies: section (3.1) deals with the accumulation of reserves; (3.2) with the bilateral and regional layers; (3.3) with the multilateral layer through the IMF; and (3.4) discusses the comparative advantages of this last alternative.

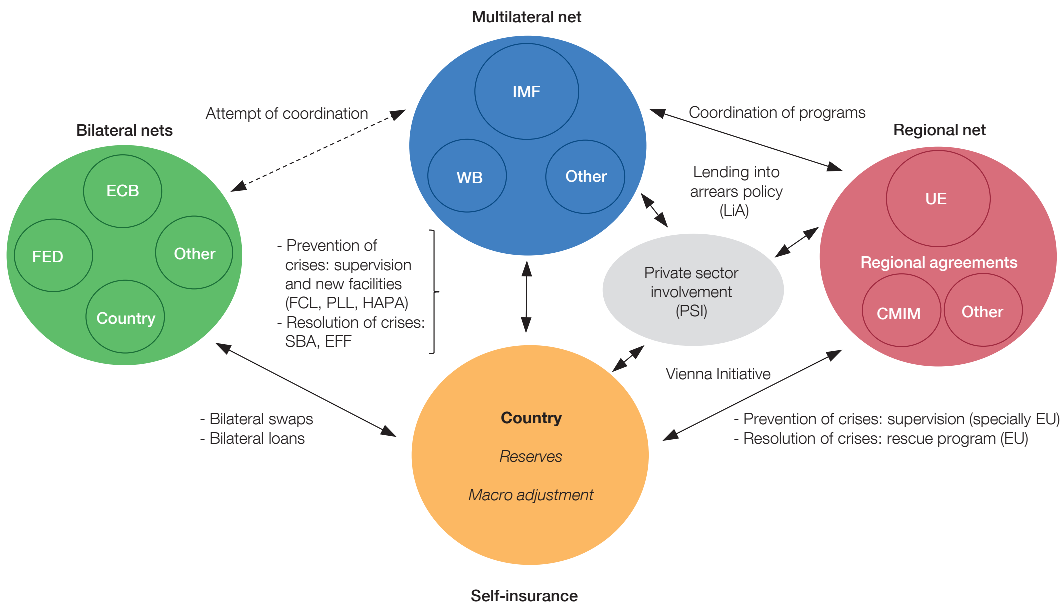
3.1 Accumulation of reserves (self-insurance)

The intense process of accumulation of reserves in emerging economies has been a prominent feature of the International Monetary System (IMS) since end of the 1990s. While this process has allowed certain countries to counteract the freezing of credit markets through the use of reserves, there is also concern about the inefficiencies that it can introduce on

1 As an alternative to public insurance, there is in theory the option of private sovereign insurance to cover the freezing of capital markets. However, in practice this is a very small and unprofitable market unable to meet the needs of large countries. It is limited to few and expensive assets such as options on the index VIX (Volatility on the S&P 500 options), options on the EMBI (Emerging Markets Bond Index), or GDP indexed bonds, which are generally non marketable (IMF, 2009a).

THE GLOBAL FINANCIAL SAFETY NETS

FIGURE 3.1



SOURCE: Garrido, Moreno and Serra (2012).

the allocation of resources in both, accumulating countries, and the international economic system as a whole.

When analyzing the insurance function of the accumulation of reserves with the scope of the Fund's role, it is interesting to consider several aspects: (a) the determinants and inefficiencies of the accumulation of reserves, and (b) the role that the IMF can play to address excessive accumulation.[2]

A THE GROWING ACCUMULATION OF RESERVES: DETERMINANTS AND DISTORTIONS

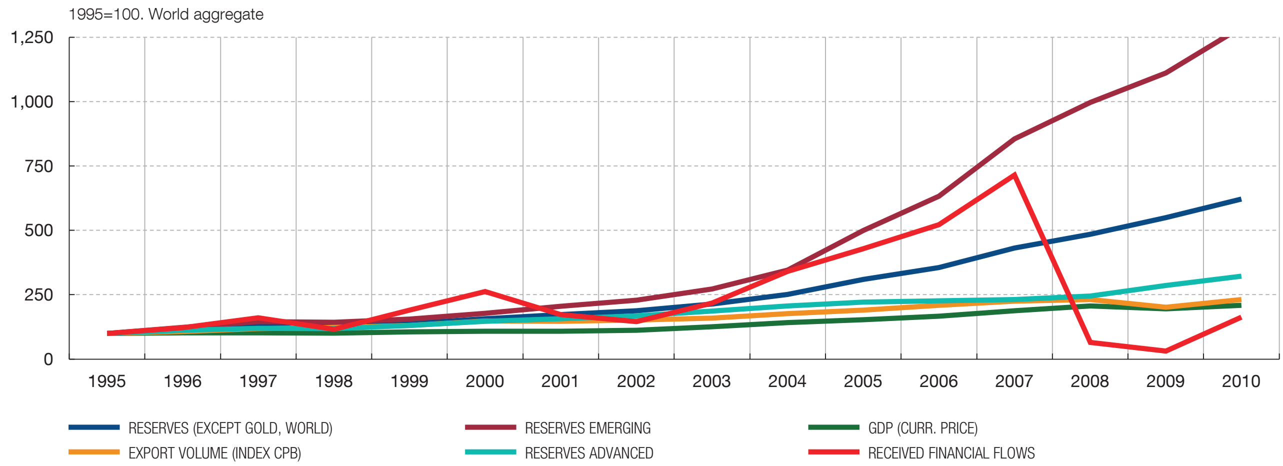
Global demand for reserves has increased exponentially in the last 15 years. This growth is much higher than in other macroeconomic and financial variables, especially since 2000, when the pace of reserve accumulation accelerates, with an average annual growth of 15.4%, surpassing the growth rates of GDP, trade, or international financial flows (more than duplicating it since 2008, see Figure 3.2). Foreign reserves have increased from US$ 1.5 billion in 1995 to US$ 9.7 billion in 2010, representing approximately 15.4% of world GDP (IRC-TFIMF, 2010).

The accumulation of reserves shows two main trends: first, it is concentrated in US dollars that represent between 60 and 70% of total reserves, which introduces problems of asymmetry in the IMS and concentration of risks in the central country (the US). Second, the accumulation is essentially a phenomenon of emerging economies. In relative terms, emerging economies accumulate reserves amounting on average 32% of their GDP, well above the advanced economies (12%). Accumulation is particularly intense in China and Middle East oil exporting countries (with accumulation above 50% of GDP, see Figure 3.3a), which account for about two thirds of the reserves accumulated between 2000 and 2009 versus 25% in emerging economies of Eastern Europe and Latin America. China alone (including Hong Kong), accounts for about one third of global reserves, followed by Japan, Russia, Saudi Arabia, and India, which together account for one additional quarter (Figure 3.3b, IRC-TFIMF, 2010).

2 This section draws from the report of the task force on IMF issues of the ECB International Relations Committee in which the author has participated: "Strengthening the international monetary system: Reserves" (IRC-TFIMF, 2010).

COMPARATIVE GROWTH IN THE ACCUMULATION OF RESERVES

FIGURE 3.2

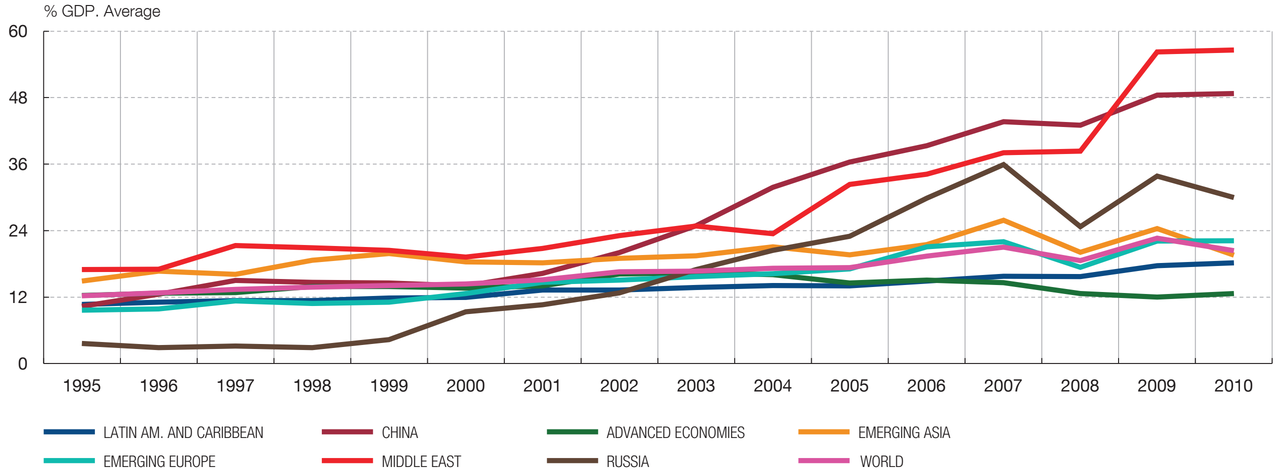


SOURCE: IRC-TFIMF (2010).
NOTE: Data from WEO, WDI, IFS, Netherlands Bureau for Economic Policy Analysis (CPB).

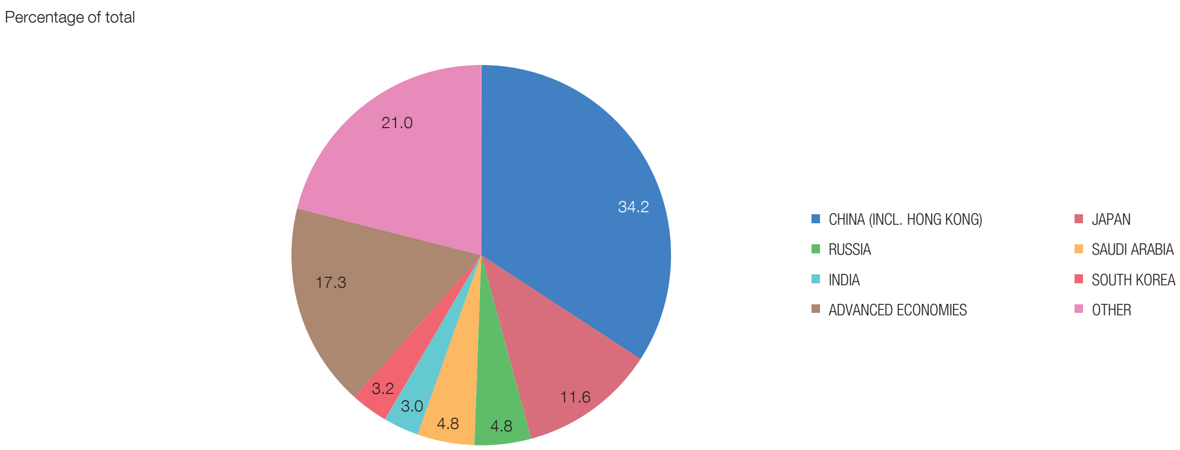
DISTRIBUTION OF RESERVES BY COUNTRY GROUPS

FIGURE 3.3

a. **RELATIVE ACCUMULATION.**
Reserves (except gold)



b. **DISTRIBUTION.**
Reserves (except gold). 2010



SOURCE: IRC-TFIMF (2010). Data from WDI.

During the crisis, many countries have used their reserves to maintain liquidity in their financial systems, to smooth the effects on the exchange rate, or to offset the fall in exports and trade financing.[3] Between the second quarter of 2008 and the first of 2009, global reserves fall by around 8%. This fall is nonetheless concentrated in a handful of countries: Russian reserves drop 38% during this period, Poland (25%), and India and South Korea (20% each one) (BIS, 2009). Therefore, the reserves have played on this initial stages the role of self-insurance. In fact, emerging economies have continued their accumulation strategies so that by the end of 2009 the level of reserves before the crisis was exceeded. Since 2009, Latin American countries, traditionally reluctant to the accumulation, have joined this strategy with public announcement of their intentions[4] (IRC-TFIMF, 2010).

Inefficiencies of excessive accumulation

As an insurance policy, reserve accumulation gives the country the advantage of immediate availability and autonomy, not having to rely on third parties to tackle a problem of sudden stop in capital markets. It only requires a decision by the monetary authorities to maintain liquidity. However, the accumulation poses problems in terms of sufficiency, to the extent that the country does not have sufficient reserves to meet its needs, but also in terms of the inefficiencies they can introduced in the IMS. As we saw in Chapter 1, the excessive concentration in dollars introduces the Triffin's dilemma, generating systemic risks associated with the central country delivering the reserve currency, but there are also problems in terms of regional and domestic inefficiencies. Figure 3.4 summarizes the inefficiencies associated with excessive accumulation of reserves.[5]

The determinants of reserve accumulation

Given the rapid pace of reserve accumulation in the past two years, the political and academic debate on the determinants of the accumulation has been intensified. On the one hand to establish which determinants produce greater inefficiencies in the international economic system and, on the other, to what extent GFSN can be alternatives to reserve accumulation.

From the point of view of the accumulation of reserves as self-insurance policy we may differentiate between (i) precautionary demand for reserves, and (ii) non-precautionary (IRC-TFIMF, 2010). The GFSN may, in principle, be an alternative to the reserves in the case of the precautionary demand, but not in the accumulation motivated by other determinants:

(i) The precautionary demand for reserves; it refers to the demand motivated by self insurance against sudden currency shortages, either because a sudden stop in capital inflows, or because domestic capital flight. This type of demand is associated with the acceleration in savings and the increase in reserve accumulation of Asian countries in the second half of the 1990s. Reserves gave a signal of confidence to foreign and domestic investors about the country's ability to meet its balance of payments obligations without resorting to government funding, or being subject to IMF conditionality (Bernanke, 2005).

(ii) Non precautionary demand for reserves. The demand for reserves may be determined by other factors, most notably the so-called mercantilist motive (IRC-TFIMF, 2010).
    - Mercantilist demand. The country demands reserves in order to maintain competitiveness via an undervalued exchange rate, as part of a policy of

3 Reserves have been used for exposure to exchange rate risk in trade operations; the case of Comercial Mexicana had a high international impact.

4 For example in Mexico, Governor Agustin Carstens announced that they would continue accumulating reserves in 2011 despite having reached high historic record of US$ 123,000 million in 2010 (WSJ, 2011).

5 See Bini Smaghi 2010 for a detailed review of global inefficiencies.

INEFFICIENCIES ARISING FROM EXCESSIVE ACCUMULATION OF RESERVES

FIGURE 3.4

Global and regional inefficiencies	**Global imbalances.** Reserve accumulation introduces negative externalities by distorting the direction of international capital and trade flows, global liquidity conditions, or the worldwide distribution of final demand. The reserves contribute to global imbalances by financing the current account deficit and contributing artificially to the maintenance of low interest rates in the U.S. (and elsewhere), and thus indirectly influencing the accumulation of excessive risks in the private sector. **Trade diversion.** When reserve accumulation is associated with the maintenance of undervalued exchange rates to maintain competitiveness, it has effects equivalent to protectionist policies (export subsidies or taxes on imports) and thus introduces inefficiencies in the international allocation of resources (trade diversion). **Lack of regional adjustment.** The effects on the exchange rate of accumulation in a country induce imitation effect on the economies of the region, to maintain trade competitiveness (currency war), limiting the flexibility of their monetary policy and introducing inefficiencies resulting from exchange rate misalignment.
Domestic inefficiencies	**Quasi-fiscal costs.** In the short term, reserve management requires sterilization by the central bank to maintain the independence of monetary policy, introducing quasi-fiscal costs because the negative differential between the yield on reserves and sterilizing instruments (if the type on domestic debt exceeds that one on the assets in reserves). Moreover from a certain level, sterilization with instruments such as issuing bonds or the sale of government bonds by the central bank may require administrative and quantitative restrictions that may distort the bond market. There appears also an opportunity cost in terms of keeping national savings in securities of developed countries versus domestic investment projects with highest return. **Misallocation in domestic financial markets...** In the longer term, if reserve accumulation is linked to anchoring the exchange rate, it introduces distortions in interest rates and in relative prices that can prevent the development of a modern financial system and affect the growth pattern. The maintenance of an artificially undervalued exchange rate means artificially low interest rates -to prevent speculative capital inflows- generating an undervaluation of savings and excess demand for domestic credit, and thus potential investment excess and asset bubbles. The low rates also introduce distortions in income distribution hurting deposit holders. **… and markets for goods and services.** An undervalued exchange rate introduces inter sector distortions reducing the relative price of tradable goods in detriment of the services sector with potential negative implications for employment and consumption (a).

SOURCE: Based on Dorrucci y McKay (2011) and IRC-TFIMF (2010).

a Rodrick (2006) estimated in 1% of GDP the social cost of reserve accumulation.

export-oriented growth. This motive underlies the link of exchange rates to the US dollar in Asia (Dooley et al., 2003).

— Underdeveloped domestic financial markets. The country accumulates reserves and invests in advanced economies because of the impossibility of channeling savings into domestic financial markets. The US offers a much more developed financial system with comparative advantage in terms of deepness, liquidity, security, legal infrastructure, and integration in increasingly globalized financial systems (Knight et al., 2008).

— The threshold effect. The country accumulates reserves, not so much from a strategy of optimality, but in relative terms to other emerging economies to avoid appearing to the markets as being more vulnerable. South Korea has been an authoritative voice in denouncing this kind of situation, noting that despite the large size of its reserves, they have been forced to continue to accumulate, because markets take into account the comparative levels of reserves rather than economic fundamentals.

— Inter temporal savings. The country accumulates reserves as savings for future generations, in periods of high commodity prices and high current account surpluses.[6] This is the kind of strategy that would follow the oil and commodities exporting countries.

6 Most oil-exporting countries have established Sovereign Funds to manage oil revenues and investments, but still maintain some of the revenue in the form of reserves in their central banks (see Alberola and Serena, 2008).

— Demand linked to financial stability. Reserves are accumulated as part of a policy of financial stabilization to avoid the harmful effects of strong capital inflows into the country in terms of potential credit booms and investment bubbles.

When assessing the impact of reserve accumulation on the IMS, there is a normative judgment on the effects of the different determinants. In general, we may conclude that precautionary motives, inter temporal savings, or the demand linked to financial stability, tend to underpin the stability of international capital flows and may be considered efficient in terms of inter-temporal allocation of resources, a short of "good cholesterol" to the IMS. However, the mercantilist and threshold effect demands, introduce distortions in international trade and international capital flows, i.e. "bad cholesterol".

In practice it is difficult to distinguish what are the driving determinants of the accumulation and there is no conclusive empirical evidence on it.[7] However, there seems to be some consensus that mercantilist determinants of exchange rate protection are central to the demand for reserves. In this sense, the criticism of reserve accumulation is directed mainly to Asian economies, especially China,[8] which appear as the major economies that have pegged their exchange rates against the dollar, and are those that have been concentrating most of the reserves.

B THE FUND'S POLICY ON RESERVE ACCUMULATION

Both the G20 and the IMF have enhanced the dialogue on the accumulation of reserves, its effects and possible alternatives. A first alternative is the activation of substitutive financing mechanisms such as the GFSN, which will be dealt with in subsequent sections (bilateral, regional and global mechanisms). When evaluating these alternatives it will be necessary to assess, not only the extent to which they constitute a viable substitute to the accumulation of reserves, but also the cost in terms of the inefficiencies they can also introduce in the IMS. Now, the GFSN can be an alternative to a precautionary accumulation of reserves, but it is less clear that they can be a substitute for non precautionary accumulation. Beyond the GFSN other initiatives are being developed to mitigate the intensity in the accumulation, and its concentration on the US dollar. It is interesting to note the role that the IMF may play through two policies: its surveillance, and attempts to reform the IMS (Figure 3.5).

Surveillance policy and accumulation of reserves

The IMF can contribute through its surveillance policy to promote strategies of accumulation of reserves that minimize inefficiencies. Given the lack of sanctioning instruments, surveillance policy uses persuasion through its messages and the different surveillance instruments.

In relation to the message, there is a conflict between advanced economies (US and Europe), that emphasize the excessive accumulation of reserves, and emerging economies (specially China), which question the excessive reliance on the US dollar and global liquidity problems. Notwithstanding this broader scheme, the dominant IMF doctrine on reserve policy is marked by its pernicious effects on global imbalances and thus the impor-

---

7 Reliable estimates are missing because the difficulty of distinguishing the different types of determinants. Obstfeld et al. (2008) observed that the mercantilist demand is not relevant when considering the high correlation between the depth of the financial system and trade. The demand would mainly be related to the depth of the financial system and would be of the precautionary type. It is however a broad definition of "precautionary" using aggregate M2 as a proxy (IRC-TFIMF, 2010).

8 China, concentrating more than a quarter of global reserves, is a special case. Besides potential domestic inefficiencies, there is the additional risk to the IMS from the imbalances or shocks affecting China and its reserve policy.

IMF POLICIES RELATED TO RESERVE ACCUMULATION

FIGURE 3.5

Problem	IMF policies: Surveillance	IMF policies: Other policies
Excessive reserve accumulation	Content: focus on external imbalances and development of domestic financial markets Tools: thematic reports, multi country analysis, capital flows and optimality of reserves levels; Framework for sustainable growth (G20)	Insurance facilities, FCL, PLL (section 3.3) (GFSN)
Excessive weight of the US dollar in the composition of reserves	Facilitating conditions for viability of other currencies as reserve currencies	Reform of the IMS

SOURCE: Own elaboration.

tance of containing excessive accumulation. Following the G20 Summit in Seoul in November 2010, to the initiative of the US, the message has been to focus more on limiting external imbalances rather than in the exchange rate or the level of reserves.[9] Thus, in 2011, as we saw in Chapter 1, the G20 and IMF have developed a series of indicators to define what constitutes an excessive balance of payments (BoP) imbalance in the context of the MAP, and identified seven countries qualified as systemic to be monitored in more detail: Germany, China, USA, France, India, Japan and the UK.[10]

Placing the emphasis on the external imbalances provides for a more objective debate and moves the message on policy recommendations from “responding to international pressure on the exchange rate”, towards “responding to an imbalance of the national economy” (the external imbalance). The recommendation is also symmetrical, and affects both the deficit and the surplus countries. In the former, calling for a rebalancing of the external sector through domestic adjustment policies; in the latter, demanding a boost to domestic demand and greater exchange rate flexibility in order to allow greater autonomy in monetary policy.[11]

In parallel, in emerging countries with surpluses, greater transparency in reserve holdings is advocated as well as sufficiently deep financial systems, enabling them to channel resources to the domestic market, so that adjustments against exogenous shocks in the capital markets have lower domestic impact. Moreover, in the case of large economies like China, boosting domestic financial markets can reinforce the use of the renminbi, and reduce pressure on the excessive weight of the US dollar as the main reserve currency.

Regarding the instruments, the main channel is the bilateral surveillance through the recommendations contained in the Article IV reports of each country. But the IMF is also encouraging reports on spillover effects and on cross-country international economic and financial issues, which enrich the traditional multilateral surveillance reports of the WEO and GFSR. Such reports allow setting common parameters of analysis and, where appropriate, development of best international practices.

The reports covering the dynamics of international capital flows are relevant to the management of reserve policies. The Fund is working on establishing principles on capital controls as a mean of defense against the volatility of capital flows and, as such, partially substitutes for reserve accumulation. Controls are treated, however, as a temporary and

9 At the Seoul Summit, the USA proposed a compromise limiting the amount of external imbalances around + / – 4% of GDP in 2013, which was not approved.

10 This exercise will be updated in 2013. Spain and the EU have been added to the list.

11 From 2001, with the Argentina crisis and the failure of the dollar peg, the IMF has moved towards a new paradigm with greater exchange rate flexibility. For a discussion on monitoring exchange rates in the Fund see Hinojo and Martinez-Rolland (2010).

second best solution compared with macroeconomic stability and adequate micro and macro-prudential financial system regulation (IMF, 2011a). Thus, as noted by López Roa (2007), the liberalization of capital flows implies volatility risks that demand from the authorities the strengthening of the basic macroeconomic fundamentals. In 2012, the IMF has institutionalized a view in favor of an orderly liberalization of capital movements although linking the benefits of liberalization to the degree of financial and institutional development of the country, thereby moving away from recommending full liberalization as an appropriate goal for all countries at all times (IMF, 2012).[12]

Measuring the optimal level of reserves

With the increasing demand for reserves, different models have been developed attempting to identify the optimal levels of reserve accumulation. The first generation of indicators is based on coverage ratios using a particular indicator as a proxy of risk of external exposure. Among these indicators are: three months of imports, 100% of short-term debt (Greenspan-Guidotti index) or a percentage of M2 (as a measure of domestic liabilities). However, these models, because of their simplicity, do not allow taking account of country risk given the multiple determinants of international capital flows in a global context (IRC-TFIMF, 2010).

The second generation indicators are based on models that maximize the welfare of a representative citizen in an economy subject to a sudden stop in capital inflows and a fall in output and consumption. The reserves appear in the model as an insurance that mitigates the negative effects of an exogenous shock. In some models reserves are endogenous variables playing a role in crisis prevention, so that the probability of recession and sudden stop is a decreasing function of the reserve/short-term debt ratio. But the results are not conclusive: indicators yield different results on the optimal level of reserves relative to GDP in a range very wide between 8 and 30 percent. Estimates also depend on parameters such as the probability of crisis, the opportunity cost of reserves or the degree of risk aversion and therefore subject to controversy (Dorrucci and McKay, 2011).[13] Ultimately, the debate over the optimal level of reserves for precautionary reasons is inconclusive and in practice economic policy makers rely on various combinations of indicators. Most emerging economies far exceed traditional indicators.

In 2011, the IMF has developed a new method to assess the optimal level of reserve accumulation in emerging economies, which provides a measure of the risk of balance of payments from the different possible shocks (including exports, short-term debt, medium and long term debt, and money supply as a proxy for domestic liquid assets). To each of these factors is assigned a risk of illiquidity based on observations of outflows under BoP pressure situations. From this measurement, they evaluate the optimal level of reserves from a subjective assessment based on historical experience. The adequate coverage is estimated in the range of 100-150% of the measure obtained.

The IMF indicator, as any other, is under controversy, although with the advantage of being "official". It also has a potential problem of reverse signaling, i.e., potential negative market reactions if the country does not meet the IMF standard, or an IMF credibility risk, if markets do not take it into account. In this respect, the Fund itself acknowledges this measure as only a starting point, and each country will require a specific analysis for assessing its optimal level of reserves.

---

12 This view has been subject to intense discussions on the Board and the opposition of some emerging countries, particularly Brazil, a strong advocate of capital controls to counteract balance of payments risk and potentially as a long term development strategy.

13 Dorrucci and McKay (2011, box 3, p. 48) review the literature on indicators measuring the optimality of reserve accumulation.

The IMF has recovered the debate on the reform of IMS, which was also one of the priorities of the French presidency of the G20 in 2011.[14] With respect to the US dollar role, the debate revolves around two main alternatives:[15] (i) a system like the actual one based on (more) national currencies but reducing the weight of the dollar, or (ii) an increased role for the SDR (IRC-TFIMF, 2010).

(i) A (more) multi polar system. The analysis of this alternative may be approached from two perspectives, the opportunity and the possibility of encouraging a system less dependent on the dollar. In relation to the opportunity, the question is the costs and benefits of an alternative to the current system. In principle, greater diversification of reserve currencies would have advantages in terms of lower interest rate distortions in the US and the sustainability of its growth pattern, and therefore lower overall system's exposure to shocks from the central country. There would also be a more competitive reserves market with the potential to reduce the costs of holding reserve assets. However, a more multi polar system also introduces greater costs in terms of volatility and risk of exchange rate misalignment between the major reserve currencies or higher transaction costs in the management of reserves. Countries issuing reserve currencies would face further appreciation pressures with the increasing international weight of their currencies what would require adjustments in their domestic economies. Thus the benefits of the alternative to the dollar's dominance are unclear.

Regarding the possibility, the experience shows that movements towards less dependence on the dollar occur only gradually as a result of market forces or exceptionally by institutional developments (as in the case of the euro in the European Union). Much of the weight of the dollar as a reserve asset is a reflection of its central role as the main international cash currency and unit of account in financial and commercial transactions, and also to the exchange rate policy of Asian emerging economies anchored to the dollar. Eichengreen (2009) argues that over time we can expect a natural movement towards a more multi polar system as the dollar is losing its strength under the negative expectations generated about its growing twin deficits.[16] A weaker dollar will mean losses for holders of dollars that would seek better alternatives.

Exception made of the uncertainty introduced by the Euro Area crisis, aggravated since 2010, the most plausible long-term scenario will be to evolve towards greater diversification, as the main reserve holders choose to diversify their portfolios to other currencies than the dollar.

(ii) A greater role for the SDR. The crisis has reopen an old debate on the use of the SDR, but rather than recovering the discussions on supranational currency initiatives (of the Keynes bancor-type), it has focused on a more pragmatic debate on the alternatives to gradually increase the attractiveness of the SDR as a reserve asset. This being said, there have been some voices on long-term proposals to potentiate a supranational currency, mainly by the Chinese monetary authorities (Xiaochuan, 2009).

---

14 For an analysis of the evolution and challenges of the IMS see Toribio (2010).

15 World Bank President Robert Zoellick (2010), stated in an opinion piece in the Financial Times in November 2010, the possibility of recovering a sort of gold standard as a monetary asset of reference on which to anchor inflation expectations and currency values, albeit with poor resonance.

16 For a detailed analysis of his thesis on the transition of a dollar-dominated IMS to a multipolar system, see Eichengreen (2010).

In January 2011, the Fund (IMF, 2011b) presented an extensive menu of options to enhance the use of SDRs including: use by the private sector, creating SDR-denominated bonds, use as a reference for SDR international economic data (such as trade), expanding the SDR basket (to include the renminbi), SDR allocations to countries with sound policies in case of exogenous shock (which overlaps with insurance facilities), or recover the substitution account.[17] The response by the Board was very cold, the Directors highlighted the technical and political difficulties against the theoretical benefits (IMF, 2011c).

In practice, there is resistance to any advance of the SDR because it represents a new role to the IMF as global liquidity provider, thereby conflicting with the objectives and implementation of the monetary policy in major economies. So far the G20 has just promoted a special issue of SDR 250,000 million in 2009 – more linked to liquidity needs than to reinforcing the SDR –,[18] and the goal of expanding in the medium term the SDR basket to include the renminbi. Looking ahead is not likely to go far beyond this line and in any case one would only expect new issuances in the case of re-emergence of liquidity needs. Boughton (2011) describes it very well using as metaphor of the SDR takeoff "the flight of the dodo", i.e. an extinct bird that could not fly and a symbol in Anglo-Saxon culture of something obsolete or out of place.

3.2 Bilateral and regional safety nets

A second mean of insurance within GFSNs are bilateral and regional agreements. Both types of instruments have been considerably strengthened in recent years, most notably the swap agreements between central banks and, in the case of regional agreements, the new mechanisms created in the European Union in response to the sovereign debt crisis. These types of mechanisms are born from strong economic and financial links between countries, and therefore from high contagion risks that justifies a joint action.

A BILATERAL NETS: SWAPS

The shortage of foreign currencies has boosted different bilateral instruments, most notably, bilateral swaps between central banks. With the swaps, central banks exchange resources in their respective currencies with a repurchase agreement within the period of the operation and a predetermined interest rate. Other instruments include cross-border collateral agreements[19] or loans between countries. This is the case for example of the Nordic countries in the rescue to Iceland in 2008, with bilateral loans from the governments of Denmark, Finland, Sweden, and Norway in the amount of € 1,775 million. These packages usually are part of a joint program with the IMF.

The US FED has played a key role in the crisis responding to the lack of international liquidity in dollars. It established swap lines without ceiling with central banks of major advanced economies and a number of lines between US$ 15,000 and 30,000 million with ten

17 The substitution account has already been discussed in the 1970s and 1980s. This account would work as a fund in which members invest on SDRs, and countries with financing needs could withdraw from the SDR account in exchange for their currencies. Participation on the account would be based on countries IMF quota. The SDR could be used in official market in exchange for other currencies (dollars, euros). This time around it has also been ruled out because of the difficulties of distributing the exchange rate risk of an account that has liabilities (contributions) in SDRs, and assets in foreign currencies.

18 The injection of SDR 250,000 million decided in the London Summit of the G20 has been widely questioned by central banks, especially in Europe.

19 The collateral agreements allow a private bank using collateral admitted by its central bank to obtain liquidity from a third central bank. However, there has been little development of these instruments because central banks have preferred to maintain their exposures to other central banks and not to enter into transactions secured by collateral of private banks in third countries.

other central banks including four emerging economies (Brazil, South Korea, Mexico and Singapore). In 2009, the main users were the ECB (up to US$ 290,000 million), the Bank of Japan (120,000) and the Bank of England (75,000). From 2010 these lines have been reopened several times, including new swaps with the ECB during the Greek debt crisis in May 2010.[20]

The ECB also opened swap lines with Nordic countries and Eastern Europe to meet euro liquidity problems although in much lower amounts (with Poland and Hungary were established for € 10,000 and 5,000 million, respectively). China also conducted similar transactions with third countries opening lines with Argentina, Indonesia, Malaysia, South Korea, Hong Kong, and Belarus (BIS, 2010).

Automatism versus flexibility (constructive ambiguity)

Bilateral swap lines have helped to solve the liquidity problems of the system while giving confidence in the markets of some insurance function that guaranteed access to foreign currency, especially in emerging economies (Brazil, for example, maintained access to markets without having to use the swap line with the FED). While they have largely worked, a debate has arisen regarding the potential benefits of a certain automatism in setting them. The automatism would remove uncertainty problems in recipient countries, regarding the available quantities and the moment they will be received. Contenders argue that automatism also introduces problems in terms of limiting the autonomy of monetary policy of the country and induces moral hazard behavior in the beneficiary countries of the swap. In practice, major central banks have chosen to maintain the current practice of ad hoc agreements when necessary, under what is called a practice of “constructive ambiguity”.

The Fund has entered into this discussion by proposing the establishment of multi-country swap lines (IMF, 2010f), in which the IMF unilaterally provides to countries with illiquidity risk parallel swap lines for a period of 3-6 months. These lines would be offer with an automatic character in contexts of global or regional systemic crises. The same reasons that ended cooling off IMF proposals to enhance the SDR have led to false start of these lines; they were not approved because they place the IMF at the center of decisions that directly affect monetary policy in major economies and a move in the direction of an IMF as a lender of last resort.

As a substitute, after more than a year of discussions and taking profit of the momentum in the G20, in late 2011, the IMF approved a new liquidity window in the PLL.[21] It provides short-term resources for a period of six months (renewable on an extraordinary basis) and an amount of 250% of the quota that could rise up to 500%. While these resources may be limited compared with a central bank swap (with no ex ante cap), they do not require bilateral negotiations and provide certainty, if the country meets the qualification requirements of the PLL (see Chapter 5). It is therefore a good complement to the swaps.

B REGIONAL FINANCIAL ARRANGEMENTS (RFAs)[22]

Regional funds had uneven development in the different regions but, in recent years, have been enhanced as a result of the global crisis, especially in Europe. Figure 3.6 compares the characteristics of the main regional funds: European Financial Stability Fund (EFSF) replaced by the European Stabilization Mechanism (ESM) in 2012, the Chiang Mai Multilateral Initiative – these two being the most advanced in their development and resources –, the Arab Monetary Fund, and the Latin American Reserve Fund (these two the oldest ones but with limited resources).

---

20 Additionally, the FED has injected massive liquidity in the system with the successive quantitative easing (QE) packages (see Chapter 1).

21 Before the reform, the facility was called precautionary credit line (PCL) and will pass to include the term liquidity in its definition: Precautionary and Liquidity Line (PLL).

22 This section draws on Garrido, Moreno, and Serra (2012), and IRC-TFIMF (2011), in which the author has participated.

MAIN REGIONAL FINANCING ARRANGEMENTS (RFAs) **FIGURE 3.6**

Instrument	Origin and resources	Main lending characteristics
European Financial Stability Fund (EFSF) (2010-2013) European Stabilization Mechanism (ESM) (2012)	The EFSF was created in 2010 by the European Council response to support the euro area countries in response to the Greek sovereign debt crisis. The EFSF was set up as limited public company with the capacity to issue bonds in an amount of €440,000 million, guaranteed by 17 Member States of the euro zone (in proportion of their participation in the capital of the BCE); complemented by the possible co-financing by the IMF (with up to US$ 250,000 millions). In 2012, it was replaced by **European Stabilization Mechanism,** a permanent institution with a lending capacity of €500,000 million. It issues bonds backed by a total subscribed capital of €700 million (of which 80 million is paid in capital, and the rest callable capital).	**Activation and access:** Loans are activated in case of balance of payments crisis or as a partial protection of sovereign risk. It is a crisis resolution fund, but can also have insurance function. It can also be used to participate in recapitalization of financial institutions or operate in primary or secondary sovereign markets. **Conditionality and monitoring:** strict conditionality negotiated between European Commission, ECB and IMF (the troika) and approved by the Eurogroup. The three institutions monitor the compliance with the program.
	Other European funds are the **European Financial Stabilization Mechanism** (EFSM), created in 2010 for the EU-27 (with € 60,000 million in resources); and **Balance of Payments (BoP) Assistance** (since 1988), for the EU-10 countries outside the euro (€ 50,000 million in resources). They are also co-financed by the IMF and/or in coordination with other multilateral institutions (World Bank, BERD). They cover balance of payments crisis and are subject to strict conditionality.	
Chiang Mai Initiative Multilateralisation (CMIN) (March 2010)	The CMIM is an extension of Chiang Mai Initiative of 2000 (CMI), which from 2010 is multilateralised and extended to those countries which are members of ASEAN + 3 (China, Japan y Korea) and Hong Kong. It has US$ 120,000 million in resources built from members' reserves (with China, Japan and South Korea contributing 80%).	**Activation and access:** it requires the majority of votes of members, and it is activated in situations of short term liquidity problems. The country has the access to 250% up to 500% (for ASEAN countries) of its contributions. The first tranche of 20% is immediate, unconditional and temporal (180 days); the rest is subject to a SBA program with the IMF that the CMIN supplements. **Conditionality and monitoring:** strict conditionality (as a SBA program). The IMF and the AMRO (ASEAN+3 Macroeconomic Research Office) follow the program.
Arab Monetary Fund (1977)	The fund is created by petroleum-producing Arab states to lend, at low rates, to Arab states with balance of payments needs, or to finance reforms, which favor regional commercial and financial integration. It has a share capital of 2,800 millions of dollars; the highest contributions come from Saudi Arabia (15%), Iraq and Algeria (13% respectively). It does not establish a link with financing by the IMF.	**Activation and access:** activated at the request of the member country with a lending period of up to 7 years and access up to 475% of member's quota. **Conditionality and monitoring:** without conditionality for loans up to 100% of the quota and subject to a program of reforms for higher limits.
Fondo Latinoamericano de Reservas, FLAR (1988)	Its antecedent is Fondo Andino de Reservas (FAR) of 1978; which is enlarged in 1988 to non-Andean Latin-American countries (members are: Bolivia, Colombia, Costa Rica, Ecuador, Peru, Uruguay and Venezuela). It has a share capital of 2,350 millions of dollars. It provides guarantees or credits to central banks to support balance of payments problems. It does not establish a link with financing by the IMF.	**Activation and access:** it is activated at the member´s request once it declares that the country's situation of insufficient reserves, together with a report with the measures to address the balance of payments disequilibrium, including a commitment that such measures will not affect imports from the rest of FLAR members. Access of up to 250% of the countries' subscribed capital (260% in the case of Bolivia and Ecuador) for a period of 3 years. **Conditionality and monitoring:** without conditionality.

SOURCE: Based on Garrido, Moreno and Serra (2012) and IRC-TFIMF (2011).

The Regional Funds are primarily crisis resolution funds that are activated at the onset of a serious balance of payments problem and are subject to strong conditionality. The main exceptions are the initial tranche of 20% of the country's contribution to the Multilateral Chiang Mai Initiative, with immediate and unconditional access, and the FLAR, activated only with a declaration of insufficiency of reserves by the country. They are however, two alternatives that allow access to limited amounts of resources (20% in Chiang Mai and in the case of FLAR, it is endowed with only about US$ 2,350 million of total resources).

In July 2011, the European Council, in one of the successive responses trying to placate the effects of the debt crisis in Europe changed the initial design of the EFSF to allow also a precautionary use of resources,[23] which is also maintained in its successor, the ESM. Further, in September 2012, the ECB launches the OMTs (Outright Monetary Transactions), which by design introduces a strong precautionary component by conveying the message of intervention in the secondary sovereign bond markets when necessary, albeit conditioned to a program. However, given the priority in Europe to fiscal consolidation as the first and foremost way of adjustment to the debt crisis, in practice, it is likely to be limited the extent to which countries may have access.

Therefore, regional funds represent more a complement to the Fund's crisis resolution facilities (SBA and EFF programs), than to the new insurance facilities, the FCL and the PLL (except in Europe). It can be argued that the very existence of the regional fund is a safety net, because the markets will anticipate that in case of imbalances the country will be rescued. But this is a function that also meets the IMF. However, the emergence of regional funds with the global financial crisis has triggered a debate about its future development and its interaction with the IMF.

The IMF has opted for a pragmatic approach to strengthen collaboration with regional agreements (instead of confronting them as a threat), from the perspective of the comparative advantages of the various institutions. Regional funds have, in principle, a better approach to country-specific risk in a regional context, better possibilities to coordinate economic policies and peer pressure in the region, or greater effectiveness in mobilizing private sector resources. The Fund, in turn, can mobilize more resources and have greater expertise in programs, based on 60 years of history from the first SBA. Moreover, the IMF can avoid concentrating risk in the region through a global dispersion of lending resources via membership quotas (IMF, 2010g).

In practice, we are witnessing a learning by doing process in IMF-regional cooperation where the joint programs between the IMF and Europe are setting a precedent. Indeed, between 2009 and 2012, Europe and the Fund have developed a number of joint programs among which those of Greece (€ 110,000 million in May 2010, and a second program of € 130,000 million in March 2012), Ireland (December 2010, € 85,000 million), and Portugal (May 2011, € 78,000 million).[24] The IMF has contributed to these programs with the funding of around € 57,500 million (30,000 the first Greece program, 27% of the total; and 27,500 in the second, 21%), € 22,500 million (26.5%) and € 26,000 million (33%) respectively, that is, the European Union has financed most of the package.

Interestingly, the European Union even with the resources and means to address these programs on its own, has chosen to rely on the collaboration with the IMF to tackle its sovereign debt crisis. The economic, political and institutional (European Union decision-making process) difficulties in the management of the crisis, with many changes throughout 2010 and 2012, have actually amplified its effects.[25] In this sense, the situation in Europe reminds other crises and the four critical points on the resolution of financial crises pointed out by Agustín Carstens from the Latin American experience, remain very valid: (i) the technical complexity of the necessary responses; (ii) the "ugly" policy dilemmas, such as the one related to tax policy: fiscal consolidation versus economic recovery; (iii) the need to maintain the reform momentum after the crisis to further reduce the vulnerabilities that still exist, and (iv) the role of the IMF, with its expertise in solving sovereign crises (Carstens, 2004).

---

23 The EFSF has undergone several changes throughout 2011, including the ability to use leverage to operate in the debt markets, or to provide insurance to private investors in debt markets.

24 Other programs are those of Latvia (€ 4,800 million), Hungary (€ 25,500 million) and Romania (€ 18,000 million) that are co-financed through by European Balance Payments Assistance (BoP Assistance).

25 For an analysis of the inadequacies of the European institutional architecture see Malo de Molina (2011). Marti (2011) analyzes the position of Germany, which has resulted in the reform of the economic governance of the euro area.

The IMF agreements with Europe are a first experience of co-financing major programs and joint design and monitoring of the program[26] by the so called troika, the European Commission, the ECB and the IMF. In general, program coordination and conditionality has worked well, although there have been some mismatches in the timing and the interest rates granted by the Fund and the European Union. In any case, the joint programs represent a loss of the Fund's autonomy because they have to be coordinated with external institutions. This is a question which has generated some debate on how it may affect the institution.

In this sense, the G20 has set at the Cannes Summit of November 2011 a series of principles for the Fund's collaboration with regional agreements, including the maintenance of preferred creditor status of the IMF and the respect for the rules and procedures of each of the parties. Other principles go in the direction of exploiting synergies and avoid duplication, including aspects such as: dialogue, early cooperation, compatible conditionality or supervision articulated in terms of the comparative advantages of each institution.

It is interesting to note that in the European Union, unlike other regions, there is a surveillance scheme and an institutional framework (Commission, Council, Parliament and the European Central Bank) ensuring sound supervision, as necessary precondition to financing a rescue strategy in order to avoid moral hazard problems.[27] In fact, since 2010 the surveillance has been strengthened by reinforcing the Stability and Growth Pact, by establishing new instruments such as the European Semester, which establishes a procedure for the monitoring and coordination of economic and fiscal policies, or the pact for the euro, with commitments of fiscal policy and structural reforms by the country. This is a more strict surveillance framework than that of the IMF, therefore Europe offers greater assurances in relation with the moral hazard, because it has a close monitoring of the country before it reaches the crisis. The European Union also has the institutional strength to follow the programs.[28]

3.3 The multilateral net: the IMF

Between 2009 and 2010 the IMF has quickly contributed to the new global structure of GFSN through the creation of two insurance facilities: in March 2009 the Flexible Credit Line or FCL and, in August 2010, the Precautionary Credit Line or PCL. Subsequently, the FCL will be extended to eliminate its initial implicit ceiling of 1,000% of quota; and in November 2011, the PCL is amended to add a cash component, and renamed as Precautionary and Liquidity Line, or PLL. These instruments come to extend the previous precautionary framework determined primarily by the precautionary SBAs, which in March 2009 are also reformed to allow high access and labeled as High Access Precautionary Arrangements (HAPAs).

Chapter 5 discusses the specifics of the various facilities (see Figure 5.4). However it is interesting to note here the special nature of the FCL. This is an insurance facility against exogenous shocks for countries with strong fundamentals, which differ from traditional programs (including precautionary SBA), because they do not incorporate a conventional program with ex post conditionality. The country can sign it if meets the qualification criteria that measure economic strength, and can then access automatically to hard currency resources in case of a liquidity problem from international contagion. The PLL is also

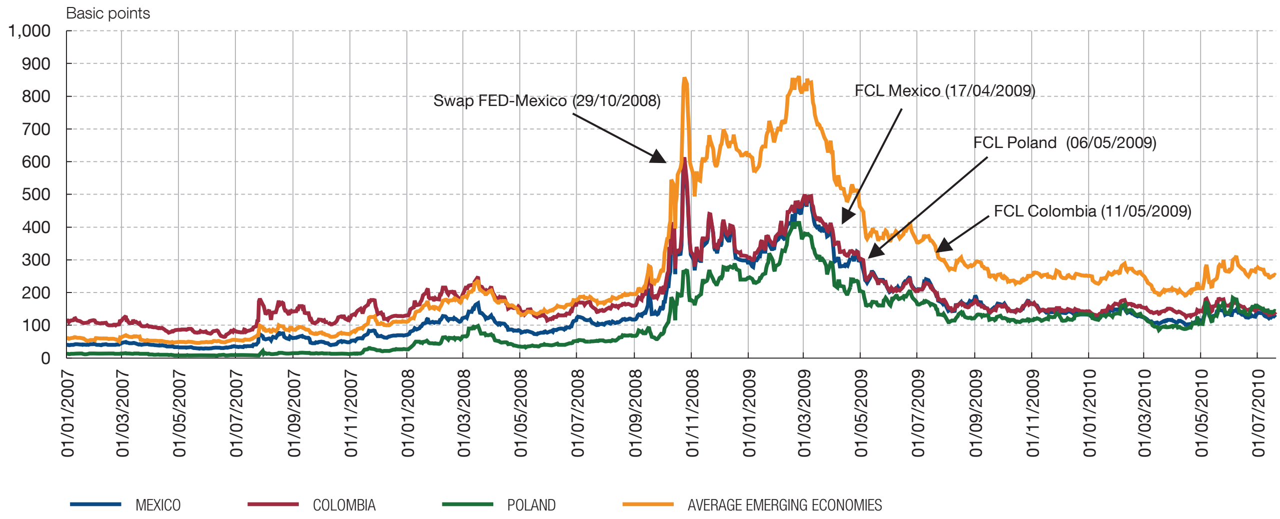
---

26 In the past, the IMF had co-financing experiences, but it has usually retained leadership in the design and monitoring of the program.

27 Moral hazard refers to the incentive by the country to maintain a less sustainable economic policy with the expectation that can be bailed-out. This is developed in the next section.

28 In the case of Chiang Mai in 2011, China has established a Macroeconomic Research Office that could follow the possible programs, but has a small infrastructure. In fact, Chiang Mai relies in the IMF for the design and monitoring of programs and the resources are conditioned upon the country having an IMF program (except the initial tranche of 20%).

CHANGES IN THE COST OF CDS IN EMERGING ECONOMIES 2007-2010 FIGURE 3.7



SOURCES: IRC-TFIMF (2010), data from Datastream, SERMI, IMF.

based on eligibility criteria, but unlike the FCL, it does require the country to develop a program, and includes conventional conditionality although focused and not applicable in the first disbursement. The HAPAs incorporate conditionality and conventional programs.

Therefore, the FCL has a substitutive character with respect to the accumulation of reserves for precautionary reasons, and to bilateral swaps between central banks. In addition, the FCL in principle has no ceiling of resources, so that the country can ensure high volumes of capital flows, generally above swap agreements, and depending on the country, also to the level of reserves. In relation to the degree of automaticity of access to resources, reserves provide greater autonomy to the country, as they do not depend on a third party. To the extent that the FCL can be a good substitute for reserves, it would help limit the harmful effects of excessive accumulation.

Since late 2010, three countries have signed an FCL, Mexico, Poland and Colombia. Anecdotal evidence suggests that FCL has had a positive effect on underwriting emerging countries. Figure 3.7 shows the cost of credit default swaps (CDS) in emerging economies. This is a chart that has been frequently used by the IMF in presentations to argue the benefits of FCL.

The subscription of FCL lines correlates with falls on costs. However, this behavior may also be due to a general improvement in market valuation of emerging economies for its better relative performance, or by the improvement of the IMF overall policy lending framework. In this sense, from November 2008 until late 2009, SBA loans to emerging economies are worth US$ 85,000 million. Further, in April 2009, the G20 London Summit tripled IMF's lending resources, eliminating any doubts about the adequacy of its resources.

In 2011 the IMF has conducted its first assessment of the FCL and PCL (IMF, 2011e). The analysis cannot be very conclusive because only two years have passed since its inception, and only four countries have requested them. Overall, the review indicates a positive impact on the perception of the risk of a crisis in recipient countries, but also in those countries perceived by the markets as FCL-alike countries. The review highlights the importance of maintaining qualitative assessment of eligibility criteria parameters, and of addressing their potential stigma problems through greater transparency, as well as using the conclusions of recently completed Article IV and FSAP reports.

When assessing the new insurance facilities of the Fund, it is also convenient to consider the inefficiencies that they can introduce into the international economic system.

Traditionally, the IMF lending policy has been assessed through the prism of two types of market failures: (a) country moral hazard, and (b) stigma.

A MORAL HAZARD

The literature on moral hazard associated with IMF programs is particularly extensive. The analysis has been focused on two main types of moral hazard:

— Country Moral Hazard: it refers to the country that endorses the precautionary facility (the insured), which would have incentive to apply less sustainable economic policies because it is covered by the IMF. The traditional mechanism for reducing these incentives is the conditionality on the successive disbursements, so that the country does not receive further installments of the loan if it does not meet the conditions of macroeconomic stability and economic policy identified in the program. The insurance facilities are not subject to the conventional ex post conditionality, it is enough for the country to meet qualification criteria (or ex ante conditionality). Unlike conventional programs the disbursements cannot be subordinated to the fulfillment of the program criteria.
— International Investor Moral Hazard: it refers to the investor incentives to reduce their requirements on the quality of economic policies of the country, because of the possibility of IMF bailout. In this case, the solution is that the private sector be involved in the adjustment programs of the country, contributing fresh parallel financing to the IMF and, if necessary, at a loss. In this area fall instruments such as the IMF's LIA policy[29] (which requires good faith negotiation with the private sector) or the Vienna Initiative, creating a forum for dialogue between multilateral institutions and private creditors to coordinate joint funding strategies. In the case of the insurance function, the same type of moral hazard is at play, and can be accentuated given the particularly high access offered.
— A third kind of moral hazard would be the one associated with IMF's own behavior in its dual role in surveillance and as lender. This raises a potential problem of incentives in the surveillance policy in the sense of making an assessment based on its interests as a lender. In this case, the risk can be minimized through mechanisms such as the separation between the surveillance and lending functions (Chinese walls), external evaluation of the programs of the Fund, or the temporal limitation of the Fund's programs.

Dreher (2004) performed a comprehensive analysis of the empirical literature and the evidence is not conclusive for any type of moral hazard. Most empirical studies on moral hazard try to observe the effects of IMF financing using various explanatory variables such as spreads on government bonds of the country, the maturity structure of loans or the benefits of financial sector stocks, all of them associated primarily to the investor moral hazard, or using the public deficit and the policy direction as a proxy of country moral hazard.

Regarding the private investors moral hazard, Dreher notes that, although for most of the explanatory variables, the studies conclude that IMF programs induce moral hazard in the investor, the results depend on the sample and are also inconclusive when the explanatory variable are the spreads on bonds (which are also the most numerous type of study). On the other hand, he notes that most of the studies have endogeneity problems

29 LiA: *lending into arrears.* For a detailed analysis of the LiA policy, see Erce, Díaz-Cassou and Vazquez (2008), Erce and Diaz-Cassou (2010), and Valle (2005).

because the private investor and country moral hazards may act in the opposite direction on the spreads of the country, so that both effects may be canceled.[30]

Jeanne and Zettelmeyer (2004) extend on the endogeneity argument of most of the literature on moral hazard, and propose a different approach: the analysis of the conditions that must be met in order to avoid moral hazard associated to Fund programs. They argue that the traditional mistake of research is focusing on the symptoms rather than the causes of moral hazard. The typical analysis examines whether the country receiving an IMF loan, experiences or not an increase in capital flows and/or a reduction in the risk premium on loans, compared to that obtained in the absence of a Fund program. But those are precisely the effects sought by IMF programs under its catalytic role, increasing flows and falling rates. Therefore, the conventional literature cannot determine whether the effects of the IMF are a symptom of moral hazard, or simply an indication that the Fund is being efficient. The same is true of moral hazard country studies, looking at whether monetary or fiscal policies are more expansive after receiving a Fund program. Again, that is the goal of the IMF, allowing greater macroeconomic policy space to the country facing a balance of payments crisis.

To study the moral hazard Jeanne and Zettelmeyer proposed that is necessary to analyze whether the IMF program results in a cost to third parties either in creditor countries or in the debtor country and suggest what they call the "Mussa theorem":[31]

> Mussa Theorem (Jeanne and Zettelmeyer, 2004): Under assumptions A1 and A2, the anticipation of IMF crisis lending increases the volume of capital flows to emerging market countries and reduces the cost of borrowing for these countries. In addition, the anticipation of crisis lending may decrease the domestic efforts to avoid a crisis. However, the IMF does not generate moral hazard stricto sensu. The expectation of IMF lending unambiguously increases the welfare of recipient countries at no cost to the rest of the world.
>
> — Assumption 1. The emerging market [host] country is run by benevolent policymaker who chooses k [capital] so as to maximize the welfare of the representative resident
>
> — Assumption 2. The IMF lends at the actuarially fair interest rate.

In this way, the analysis moves now to the design of Fund programs, to be carried out on terms and under guarantees (compliance) such that reflect the risks assumed by the Fund. In the case of assumption 2, the focus will be to determine whether the Fund loans incorporate or not a subsidy, thereby incurring a cost in terms of welfare to the creditor countries. For this, it is important to analyze whether IMF rates are actuarially fair, i.e. the requirement of no moral hazard is that IMF interest rates are sufficiently high to cover the repayment risk assumed by the Fund, which may be – and in fact usually is – lower than the risk assumed by the private lender, precisely because the Fund positively affects the solvency of the country through the program and the conditionality imposed.[32]

Therefore, the test for the IMF is to determine if the program rates are lower than the yield that it would get investing without risk, and whether or not, there are default problems in the programs. In this regard, they note that between 1973 and 2003, the rates charged to emerging economies, are equivalent to the ones the Fund would have received

30 The likelihood to receive resources from the Fund, would induce on the one hand, a reduction of government bond spreads by way of private investor moral hazard, and on the other, an increase in spreads, by way of country moral hazard, to the extent that it would reduce the quality of the macroeconomic policies. Therefore, the total effect on the spread is indeterminate.

31 Mussa was director of the IMF research department between 1991 and 2001.

32 IMF interest rates can not be compared with those faced by the country in the markets (conventional literature approach), because the IMF does not assume the same risk as private creditors.

for loans to advanced economies in the same amounts and the same time periods.[33] Regarding defaults, there have been only a few cases of late payment, in which case there is also a policy that tightens loan terms. It should be noted that the IMF has the advantage of having preferred creditor status (PCS) against any other debt.

For insurance facilities, the same structure than the SBA yields have been applied (increasing rates depending on the quota limit). But when considering these facilities, we must keep in mind their volume (loans have been granted of up to 1,500 percent of quota), without conditionality and therefore a greater risk of default. So far the closest proxies are the large capital account loans in the second half of the 1990s. The programs with Argentina, South Korea, Mexico and Turkey exceed 600% of quota (1,900 in the case of South Korea) all have been repaid on time.

In the case of Assumption 1, it is necessary that the lender country government acts taking into account long-term interests of its citizens. The problem here is to determine whether the combined effect of the policies before and after Fund loans result in a redistribution effect on household incomes that affect the average citizen, in benefit of a small elite. However, this is an underdeveloped area in the literature, with some developments focused on the redistributive effects of conditionality.[34] In the case the insurance facilities it would be relevant to analyze to what extent the guarantee provided by the IMF induces changes in economic policy with redistributive effects. However, without ex post conditionality, these effects are limited.

B THE SIGNALING FUNCTION: STIGMA[35]

The problem of stigma is part of the broader signaling role of the IMF. On the Fund's lending policy, merely granting an SBA loan for example, involves several types of signaling effects that may work in opposite directions. It indicates that the country has problems, but also access to more resources, and that it is committed to stabilizing its economy through a program supported by the IMF.

For insurance facilities of the PLL or FCL type, the objective is to signal that the country has a strong economy but, in the context of a systemic crisis, may be subject to an exogenous shock. Now this goal poses significant challenges, including aspects such as: the need to differentiate these facilities from SBA conventional loans, the definition of the divide between FCL and PLL countries, or the need to safeguard the legitimacy of the IMF when granting insurance (because it is giving an implicit endorsement of the country's policies).

As seen previously, these challenges were determinant in the non-use and extinction of the Contingent Credit Lines (CCL), which were in force from 1999 to 2003. The CCL failed, among other reasons, because of the risk that an IMF program were interpreted as weakness rather than strength, and because of the negative signal that would introduce ending a CCL, or worse, to lose eligibility to it (IMF, 2009a).[36]

The IMF (IMF, 2004c) distinguishes seven types of effects/issues to take into account regarding the Fund signaling. Figure 3.8 redefines and reclassifies these effects into four categories, focusing on the implications for a country of subscribing a program. In the design of any IMF policy (surveillance or lending), the IMF tries to find a balance between these signaling effects and the conflicts that arise among them.

These same categories apply to insurance facilities, for which the objective is: (i) to support the country that has a solid foundation without interfering in national politics

33 They estimate that there is a spread of 400 basis points in the loans to low-income countries. But in this case, the loans are concessional incorporating elements of debt relief financed by contributions from member countries.

34 Jeanne and Zettelmeyer indicate the works of Vreeland (2003).

35 The Webster's dictionary defines it as, stigma: a mark of disgrace or infamy; a stain or reproach as on one's reputation (Webster's New Universal Unabridged Dictionary, 1996).

36 Serrano and Soler (2005) propose a model in which signaling is linked to the characteristics of a particular country and its liquidity needs.

PRECAUTIONARY FACILITIES AND SIGNALING FIGURE 3.8

Signal	Problems that arise	How does it affect precautionary facilities?
Stigma	**Economic crisis.** The authorization of a program signals that the country has an economic problem, but also that it has access to more resources and is involved with the stabilization of its economy though a program guaranteed by the IMF.	The precautionary facilities FCL or PLL have to be able to establish their own signal: the country, which subscribes it, has a solid economy, although in a context of systemic, it may be subject to an exogenous shock by contagion.
	Loss of autonomy and political stigma. The risk that the program with the IMF is identified as interference in the country's political economy and loss of ownership in the design of its own policy.	Problem which is minimized in precautionary programs as long as ex post conditionality is not added.
The standard of the SBA	The different IMF facilities have to differentiate from the standard par excellence of the IMF, which is determined by the SBA. New facilities have the risk of being interpreted as equivalents or introducing distrust if it is considered they are not enough (as it happened to CCL)	New precautionary facilities have to signal that: (i) they hold on a higher quality standard than the SBA, (ii) their purpose is precautionary facility and they are not a crisis resolution facility.
Positive and negative signals	**The trade of between negative and positive signals.** The IMF tries to avoid giving negative signals about a country to prevent negative consequences they may have on international capital flows in the country; and not to undermine the candid dialogue with the authorities. On the other hand, as a public institution, the IMF could be viewed as having an incentive to send positive signals among its members. This latter risk is mitigated in the case of a loan to the country, because the IMF putting its money where its mouth is (albeit with a preferred creditor status). The mistakes in predicting the global financial crisis has weighted the balance in favor of an IMF more ready to warn ageist the risks of its members' countries.	There is a negative signal problem that appears in the dividing line between the FCL and the PLL, and between the PLL and the HAPA. If they are viewed as a sort of major, national and minor league facilities; not achieving, or losing the qualification for the FCL, there is a risk of negative signal by exclusion, i.e., rating the country as a secondary league player. On the other hand, the risk of positive signal appears if the IMF is perceived to have an incentive to maintain the positive qualification entailed by the FCL, much more given that it does not necessarily detract resources from the Fund (unless they are activated). Nonetheless, this risk is mitigated because even if they do not detract resources, the Fund has to set apart the resources committed which detract from them being used for other loans and decreasing its forward commitment capacity (FCC).
	Seal of approval. When approving a program with a country, the IMF aims at signaling to the markets that it approves the country´s economic policy contained in a program. But in parallel, this does not mean that the program is a seal of approval or bulletproof guarantee that the country will not have problems, nor as an on/off signal or rating about the country. The markets are still to assume their own risks depending on their own investment strategies.	It is a particularly pronounced problem in the precautionary facilities. The FCL entails a high degree of seal of approval on the country´s fundamentals and macroeconomic policies (define by the ex ante qualification criteria), which are judged to deserve the confidence/insurance by the IMF.
Simplification of the signal	Risk of converting the IMF program into on/off signals on the economy replacing a more multidimensional evaluation entailed in the program or in the surveillance exercise.	The precautionary facilities have a strict component of simplification based on the compliance or not of an ex ante requirement.

SOURCE: Own elaboration based on IMF 2004c.

(category of stigma); but (ii) without constituting an absolute guarantee to markets (seal of approval). (iii) Facilities must find, in addition, its own niche on the grid of the Fund's facilities (standard SBA); and (iv) differentiated from each other (simpler signal, stigma). On the other hand, (v) the Fund should not jeopardize the guarantee it provides to the markets, which will value insurance facilities taking into account the Fund's incentives when designing and granting them (positive and negative signals).

The signaling-moral hazard dichotomy

Along with the dichotomies between the various signals produced by the IMF programs, there is also one between signaling and moral hazard. A clear example is the trade-off that occurs between stigma and country moral hazard through the conditionality:

— On the one hand, the country that subscribes the precautionary facility has an incentive to apply a less sustainable economic policy because it is covered by the IMF (moral hazard). Conditionality is the traditional mechanism to correct this behavior, subjecting disbursements to the good performance of the insured. In the insurance facilities, the absence of conventional ex post conditionality does not allow to delay the disbursement, linking it to whether the country meets the criteria,[37] thus incurring in greater moral hazard.
— On the other hand, the signing of a program itself may be interpreted as signaling that the country has an economic problem (stigma) and the higher the requirements to a country in terms of compliance, the greater stigma.

Therefore, there is a trade-off: with increasing standards and selective application of conditionality to reduce moral hazard problems; the stigma for the country is heightened and vice-versa (lower standards and more universal compliance, greater moral hazard). Then design of the various precautionary facilities will have to take into account this trade-off.

In addition to managing these dichotomies, the IMF should determine what kind of role it wants to play in the GFSN. Increased conditionality can drive demand away from the Fund's precautionary facilities and preference for self-insurance through reserves, reducing the substitutive character of the Fund facilities.

All these issues are addressed in the design of the main components of the programs: activation; access limits (quantitative and temporal); conditionality (eligibility criteria, in the case of insurance facilities); and transparency, to identify clearly the objectives and characteristics of each facility. The design, however, is restricted by the inability to reach a first best solution. The goal is to minimize the trade-off between different market failures and, ultimately, it will require a judgment call on the importance to be given to each of them.

Chapter 5 proposes approaching the design features of the Fund's facilities based on three principles: adequacy, sustainability and predictability. It is interesting to note here that insurance facilities rely on the following elements:

— To contain moral hazard: close monitoring of countries as a condition for the granting of the line (one of the eligibility criteria of the FCL and the PLL requires integrity, quality and transparency of financial information) and a strict application of eligibility criteria, and monitoring (annual in FCL and semi-annual in the PLL).
— To avoid the problems of stigma, a transparent application of the facilities. The problems of stigma have been mitigated thanks to the granting of FCLs to Colombia, Mexico, and Poland (with an appropriate geographical balance) since 2009. They have not been used, and they have clearly distanced themselves from the many SBA programs granted in 2009 and 2010 to countries in crisis. However problems arise from lack of clarity in the distinction between FCL-PLL-HAPAs and the question remains whether the FCL will resist stigma issues in a non-crisis context (with less ongoing SBAs from which to be distinguished).

3.4 The IMF's comparative advantages as an insurer

In the previous sections we have analyzed the characteristics of different insurance sources against BoP exogenous shocks. It is of interest to compare what is the relative role the IMF can play through its new facilities (FCL, PLL). Figure 3.9 summarizes the

37 However the March 2009 reform allows ample front-loading of resources provided by the Fund.

COMPARING GLOBAL FINANCIAL SAFETY NETS

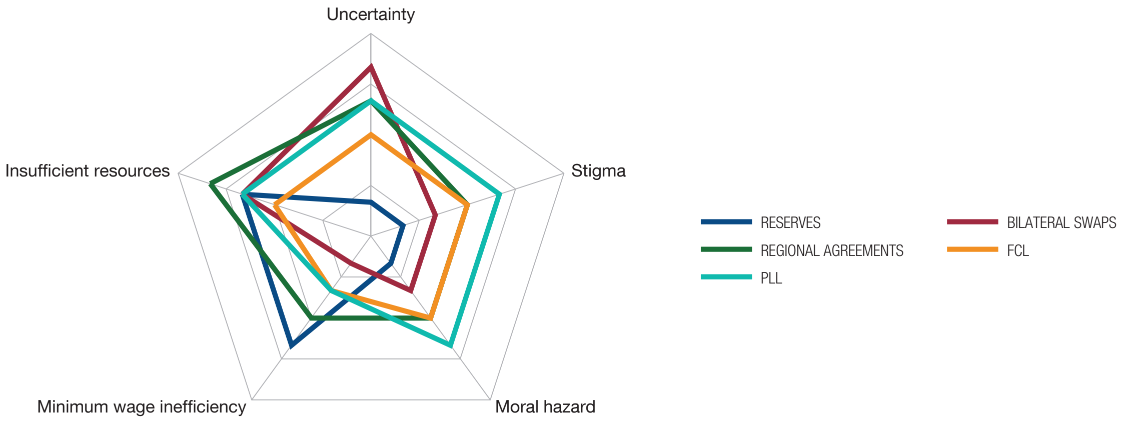
FIGURE 3.9

Resources	Advantages	Drawbacks
Self-insurance: accumulation of reserves	Autonomy No conditionality Minimum stigma and moral hazard	Excessive accumulation risks nurturing IMS imbalances Risk of domestic inefficiencies Possible insufficient resources
Bilateral SWAPS	Potential access to large volume of resources Low stigma and moral hazard (based on constructive ambiguity)	Uncertainty over quantity and will to trigger by counterparty Risk of insufficient resources
Regional Financial Arrangements (RFAs)	Proximity to country risk and regional risk-pooling Potential for larger decision making power by country	Risk of insufficient resources, stigma and moral hazard Not all RFAs include precautionary facilities
Multilateral insurance provided by the IMF	Minimum inefficiencies to the IMS Large resources and larger certainty on its triggering	Stigma and moral hazard Time uncertainty (how will precautionary facilities evolve?)

SOURCE: Own elaboration.

COMPARATIVE ADVANTAGES OF IMF INSURANCE

FIGURE 3.10



SOURCE: Own elaboration.

main advantages and disadvantages of the different insurance sources against exogenous shocks, and Figure 3.10 establishes an ordinal comparison based on five criteria: (i) degree of insufficiency of resources, that is whether or not the specific GFSN might not deliver the necessary resources; (ii) uncertainty, or degree of availability of the source to the country; (iii) stigma, or a negative interpretation of the facility by the markets; (iv) country and investor moral hazard, or degree to which markets discount the rescue, and (v) inefficiency to the IMS, or to what extent the specific GFSN affects global imbalances. The closer the pentagon to the center, the better performance of the source/GFSN.

In general, FCL and PLL have three major advantages (i, ii, iii) and two major drawbacks (iv, v) over all other sources:

(i) Increased access to resources for most countries (except the large accumulators of reserves): the PLL allows up to 1,000% of quota, and the FCL uncapped access. As an example, the resources provided by the FCLs for Mexico (72,000 million, 1,500% of its quota) and Poland (29,000, 1,400%), exceeded the Fed's swap to Mexico (30,000 million), and represented respectively 60% and 30% of their reserves. In addition, the swaps access has more time limitations (3 to 6 months, although renewable) compared with the 2 years of FCL and PLL. Regional agreements are currently equipped with few resources except the European ESM, which however has not being used for precautionary purposes.[38]

(ii) Greater certainty: the country can rely on IMF resources if it meets the qualification criteria, while bilateral swaps have greater uncertainty (dependent on the counterparty), and regional agreements have a less developed insurance framework and lower resources. The certainty of the IMF depends on the adequacy of its resources, underpinned with a tripling decided at the G20 Summit in London in 2009; later reinforced with the duplication of quotas adopted in the November 2010 Summit in Seoul; and the additional temporary resources of around US$ 460,000 million decided in 2012 at Los Cabos Summit. The reserves do give to the country greater autonomy and certainty of provision than the facilities of the Fund.

(iii) Lower global inefficiency: especially in relation to excessive reserve accumulation and its negative effects on the sustainability of global imbalances. Regional agreements would also suppose relative inefficiency respect to FCL, to the extent that the regional funds accumulate excess reserves to cover its partners. Additionally, the IMF allows for global diversification of risk assumed by the full membership of countries (compared to a regional one).

(iv) Greater stigma: because of the negative interpretation by the market of the execution of a program with the Fund. This negative stigma is shared with regional agreements, and would be greater in the case of the PLL than in the FCL, since the eligibility criteria of the second are stricter. Reserves and swaps involve less stigma.

(v) Greater country and investor moral hazard: lesser economic policy discipline and greater assumption of risk by the investor to the extent that it is presumed an IMF bailout. This risk is also shared with regional agreements and, in principle, would be greater in the case of the PLL, considering that qualification criteria are less strict than the FCL (and thus, the distance between the applied policies and the risky ones are lower). The accumulation of reserves and swap incorporate less moral hazard, in the first case because the country uses its own resources, and, in the second, by being of a temporary character.

In short, the FCL and PLL provide an insurance framework that complements the accumulation of reserves, bilateral agreements (swaps), and regional safety nets. They allow diversifying the risk of systemic crises through an institution with a global presence, providing a high level of resources in the medium term (at least two years and renewable), and limiting the inefficiencies of excessive reserve accumulation.

Nonetheless, it seems unlikely that FCL and PLL can play a substitute role for reserve accumulation. Precautionary reserve accumulation in emerging countries allows for an autonomy in the management of risk, that has no parallel on IMF facilities. Additionally, the Fund does not guarantee long-term certainty that depends on the renewal of the FCL or PLL (every two years). Furthermore, FCL and PLL are not substitutes for reserve accumulation under mercantilist reasons (probably dominant in large accumulators).

38 The OMTs (Outright Monetary Transactions) launched by the ECB in September 2012 acts as a very strong precautionary instrument, as it conveys the message of intervention in the secondary sovereign bond markets when necessary, albeit conditioned to a program.

For now, the FCL has shown some effectiveness in countries with median reserve levels, such as Mexico and Poland. The future challenge is twofold: (i) reduce moral hazard and stigma problems of the FCL and the PLL, which depends on a strict application and monitoring of the eligibility criteria; and (ii) to give them some stability over time, facilitating its renewal, to ensure that the country may count on them as close substitute to precautionary reserves (Chapter 5 develops this possibility).

4 Governance: emergence of the emerging countries

> The difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds *(John Maynard Keynes, 1936, preface).*

The representation of countries in the IMF should be determined by its relative economic weight in the global economy. However, in practice, due to historical inertia, the quotas assigned to the countries have not been adapted over time, so that the economies with higher growth over the last 30 years have seen a growing under-representation. The result has been that the IMF has remained under the direction of the large advanced economies of the G7.

From the late 1990s, in a context when the IMF was criticized for its rigidity in handling the Asian crisis, emerging countries begin to question the usefulness of the IMF to meet their national interests, and try to seek regional alternatives to cover the Fund's functions. There is a certain disconnection with the IMF where they lack weight in the decision making. Increasingly at the beginning of the 21st century, emerging countries question the legitimacy of the IMF, its relevance as rescue institution – in 2005 Brazil and Argentina paid off their debts to the IMF –, or the asymmetry of its surveillance, more benevolent towards advanced economies.

In the midst of this debate, as of 2006, the IMF began a profound reform in its governance, accelerated from 2009 as a result of the global financial crisis. This reform – still underway – involves historical changes in quotas and country representation, after nearly 60 years of maintaining the status quo. The result is an institution with a greater balance between emerging and advanced economies in decision making.

This chapter analyzes the changes in IMF governance. To understand the implications of these changes it is of interest to consider a dual decision-making structure of the Fund (Figure 4.1): the formal structure (blue squares) and the informal one (red circles), and the interrelations between them.

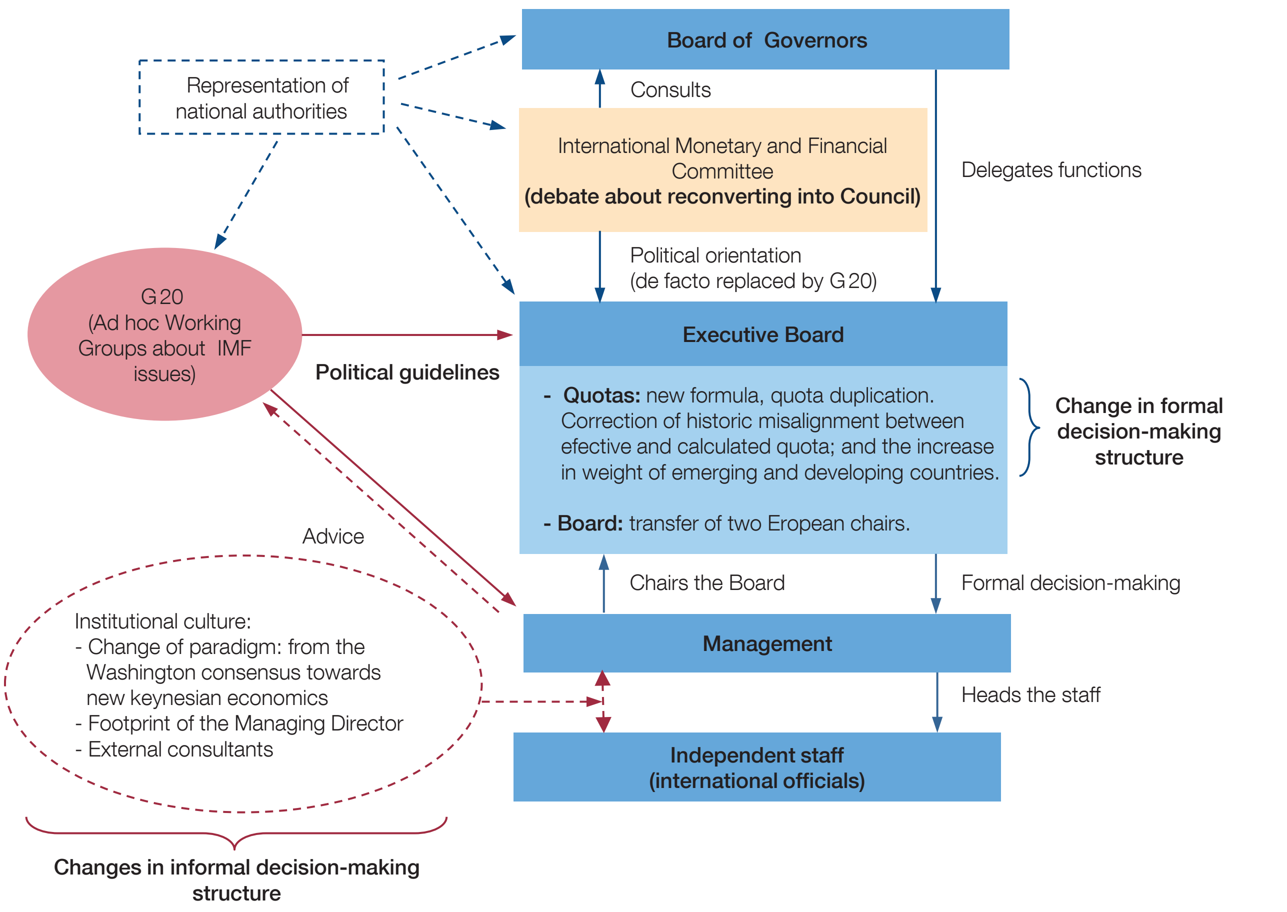
Decision making is formally done through two main interacting structures. On the one hand, the Executive Board, the body where the member countries are represented, and where all the Fund policies must be approved. On the other hand, the management and staff, which are responsible for developing the Fund's policies and monitoring its programs, which then must be endorsed by the Board. The management and staff have the power of initiative, they prepare the reference documents for Board discussion. The staff consists of about 2,400 independent international officers directed in their daily activities by the management, which is elected by the Board.

In parallel, there is an informal structure of influence on the policies, which are articulated either bilaterally, or via groups of countries such as different Gs configurations or the EU and BRIC coordinated positions. In the past, the main influence came from the G7 (and especially the US), but from 2008 it has largely been replaced by the G20. Another important aspect of the informal structure is the ideological and academic background of staff and management, given its high capacity to orientate the policies of the IMF with its power of initiative.

Three main schools of the international relations theory may be distinguished to explain decision making in the Fund: (i) realism: decision making is articulated by the member countries. In particular, the US (first) and the G7 have led the Fund destinations. (ii) Bureaucratic theories: it is the independent staff through technical and intellectual mastery over the institution, which determines the Fund's policies guided by self-interest. (iii) Theories

THE IMF DECISION-MAKING STRUCTURE

FIGURE 4.1



SOURCE: Own elaboration based on Martinez-Diaz (2008).

of delegation, based on principal-agent models, under which the countries (the principal) delegate power in the international organization and its staff (the agent), which enjoys wide latitude to take decisions. However, the principal maintains control mechanisms and the ability to change the direction of the policies of the Fund at a particular time (Momani, 2008).

We follow here this third approach of the agency theory, considering it the closest to the IMF's reality. In recent years, the IMF staff and management have designed the reforms, but these would have not been possible without the encouragement and guidance of the G20. In the next sections we analyze the most significant changes that have occurred in the informal structure (4.1), mainly the change to the G20 as the new principal and the new institutional culture of the agent (management and staff); and in the formal structure, primarily changes in the (4.2) quotas and the (4.3) Executive Board.

4.1 Changes in the informal decision making structure

A A NEW PRINCIPAL: FROM THE G7 TO THE G20

Traditionally, the IMF has been an institution guided by the strategic orientation of the G7 and with a strong Anglo-Saxon influence both, because the high influence of the US Treasury (and also that of the UK); and because of the institutional culture of the staff itself with an overwhelming majority of officers trained in American and British universities.

The US historical influence on the Fund's policies has been analyzed by different authors. Mack (2009) reviews the literature finding a majority of authors who are dedicated to corroborate US power. In this group Hudson (2003), provides a historical analysis of USA imperialism in the twentieth century, including numerous examples to substantiate the claim that the IMF has been from the beginning a tool for the economic and strategic interests of the US. At the other end, Kenen (1989) takes a more multipolar approach in which the IMF tries to balance different interests besides those of the US. In a complex structure like the IMF different actors (countries, staff, and management) combine interests and it would be very simplistic to limit the Fund targets only to the US interests. In fact, from the mid-1970s, probably we can speak more of G7 than of US influence. In any case, there is general consensus, or at least a general perception that the US and the G7 have been major players in the strategic direction of the Fund.[1]

Precisely from this perception, in the late 1990s and linked to the IMF role in the Asian crisis, a debate opened on what came to be labeled as a New International Financial Architecture (NIFA).[2] One of the elements in the NIFA was the reform of the governance of international institutions asking for greater weight of emerging economies. The Managing Director of the Fund at the time, Michel Camdessus (1998), proposed G8 meetings with heads of state and government of the countries with an Executive Director at the IMF. In this line, the G20 would be created in 1999, but only at the level of finance ministers and central bank governors. It was not until 2008, as a result of the global financial crisis, when the G20 summits were established at the highest political level with the heads of state and government.

The perception of an IMF disconnected from the interests of emerging economies was accentuated by the mistakes in the management of the Asian crisis in the late 1990s. In this regard, the report of the Independent Evaluation Office of the IMF (IEO) on the management of the crisis in South Korea, Brazil and Indonesia, revealed the many mistakes made by the Fund. There was excessive rigidity in the programs with the traditional recipes of rapid fiscal adjustment and high structural conditionality – which are reasonable in the long term, but not strictly necessary to remedy the short term needs of the crisis – at a time when the key objective should have been regain market confidence.

The IMF also made errors of communication and transparency about the rationality of the programs, and insufficient ownership by the authorities, which exacerbated the crisis of credibility (IEO, 2003). The result was a worsening of the crisis in many countries, moreover, the IMF has been in part made responsible of the outbreak of the crisis for their support to a premature liberalization of the capital flows without sufficient financial regulation in Asian countries, resulting in massive entries of short-term capital that were at the root of the crisis (Stiglitz, 2002).

The dissatisfaction with the programs installed in Asian countries an increased reticence towards the IMF both among its political class and the public opinion, which still stands today. The result is that these countries cooled their relations with the Fund and began to seek alternative solutions to ensure against possible future crises, mainly through reserve accumulation or the activation of bilateral and regional agreements such as the Chiang Mai Initiative.

The aversion to the IMF extends in the early 21st century to Latin America, in this case, accentuated after the errors in managing the Argentina crisis in 2001. In the years before the crisis, the IMF erred in its assessment of the convertibility plan peso-dollar at parity, maintaining its support when it was no longer sustainable, and also failed in monitoring the Argen-

1 Bradford (2009) emphasizes the importance of informal channels of US and European influence in the IMF, as a model for emerging economies if they want to settle their weight in the institution.

2 The term International Financial Architecture was settled in 1998 by the then US Treasury Secretary Robert Rubin (1998). For a discussion of the reform of the international financial architecture in historical perspective see Granell (2010). In a general analysis of the progress in the NIFA between 1998 y 2003, Casas et al. (2004), conclude that results had been very modest.

tine fiscal objectives that ended in an unsustainable debt spiral (IEO, 2004). Argentina finally left the IMF program and managed a debt restructuring with debt haircuts of up to 75%, without having managed to recover normal access to international markets a decade later.

The Latin American countries also responded by distancing themselves from their relations with the IMF. In December 2005, Brazil and Argentina decided to cancel their debts to the IMF totaling US$ 15,500 and 9,600 million, respectively, anticipating payments due in 2007 and 2008. There were also attempts to create regional funds such as the Banco del Sur initiative led by Venezuela, still to come to fruition in 2013.

By 2005, the Fund is in a state of alienation from emerging economies, with reduced financial presence and the volume of loans at historic lows (just SDR 10,000 million in 2007). There was then a discussion on the loss of relevance of the IMF, reflected in the lack of leverage on emerging economies and low incidence in the surveillance of advanced countries. As we shall see in the next section, in this context, Rodrigo de Rato, former Managing Director, drives a medium-term strategy to give a greater role to emerging countries in the institution.

This momentum will increase from 2008 with the November G20 Summit, marking the transition towards a New International Economic Order with the G20 as a new global forum for coordination of macroeconomic policies. Chapter 1 addresses the central role of the G20 in the NIEO, which as we saw responds to a new economic reality in which emerging countries are the new engine of global growth, and will surpass the advanced countries weight in world GDP.

Since 2009, the G20 has been determinant in the Fund's strategic direction. It has the capacity to impose decisions on the Board because it represents chairs with a voting power of 83.6% (very close to the 85% qualified majority required for major decisions in the IMF). Moreover, from 2010 the G20 has created specific working groups in which reforms have been designed and later approved by the IMF. Two examples of the preponderant role of the G20 have been: the tripling of resources determined in the London Summit and the governance reform (increase of 100% in quotas and Board reform) adopted by the G20 Ministers and Governors in October 2010 in Seoul. These two decisions were taken first by the G20 and then endorsed by the IMF Board.

An additional element in this change has to do with the nationality of the Managing Director. Reflecting the dominance of the G7 on the IMF, traditionally, the heads of the IMF and World Bank were to be occupied by a European and an American national respectively. This informal agreement is being revised so that the choice be based on the candidate's suitability regardless of nationality. The succession of Dominique Strauss-Kahn in 2011 was a first opportunity to test this type of approach. For the first time there has been an emerging country candidate, the Mexican Agustin Carstens, with a curriculum for the position very difficult to improve.[3] In the end, the Europeans imposed their majority vote naming the French Christine Lagarde. Probably, the transition to the G20 as the principal will only be completed when an emergent country national leads the IMF.

The Fund has improved the balance in the management. In May 2010, Zhu Min, former deputy governor of China's central bank, was appointed as special advisor to the management and later, in July 2011, deputy Managing Director. This appointment is a recognition of the role to be played by China in the IMF and brings to two the number of Deputy Managing Directors of emerging countries.[4]

---

3 Agustin Carstens held positions as deputy Managing Director and Executive Director at the Fund, as well as Finance Minister and Governor of the Bank of Mexico.

4 Previously, management was composed by a European, an American, a Japanese and a representative from an emerging country. IMF management consists of the Managing Director, Christine Lagarde (French), a first deputy managing director, David Lipton (American) and three deputies: Naoyuki Shinohara (Japanese), Min Zhu (Chinese) and Nemat Shafik (Egyptian-British, occupying a position that traditionally had taken a Latin American).

B INSTITUTIONAL CULTURE: FROM THE WASHINGTON CONSENSUS, TOWARDS NEW KEYNESIAN ECONOMICS?

IMF policies are largely determined by management and staff. The various Managing Directors have marked its seal on the Fund, leading major institutional changes. It was for example the case of Michel Camdessus (1987-2000), who played a central role in boosting the Fund's policies aimed at low income countries, or Rodrigo de Rato (2004-2007) with the IMF's Medium Term Strategy to restore institutional legitimacy.[5]

Dominique Strauss-Kahn began his tenure in the Fund in November 2007, and his term was marked by the institutional response to the global financial crisis. During these years the Fund has extensively revised its surveillance policy, strengthening multilateral financial surveillance (including support for more regulation) and boosting the overall coordination of macroeconomic policies; and it has experienced a turning point in its lending policies, marked by the easing of conditionality and a substantial increase in access limits. Notwithstanding the risk of simplification, Strauss-Kahn left a legacy of an IMF surveillance more adapted to the reality of economic globalization; a more flexible lending policy; and a transition in policy prescriptions from a neoclassical to a New Keynesian economics approach.

The debate on the role of the IMF and its policy recommendations is not new and is part of the general debate between Keynesian and neoclassical economics. In the context of the IMF's intervention before the sovereign debt crisis of the 1980s in Latin America, Smith (1984) described it in terms of the debate between advocates of market versus advocates of government intervention justified by market failures, that was answered by Solomon (1983). Both play a very similar debate to the current one. Smith questioned any IMF intervention, noting that with flexible exchange rates, they would reflect any exogenous shock and create incentives in each country to adjust domestic policies. Solomon challenged arguing that the Latin American crisis of the 1980s did not originate in the region, but was the result of the recession and high interest rates in international markets. That was the case of Brazil which experienced export declines of 20% between 1980 and 1982, after growing at 10% rates for a decade. IMF loans provided temporary cushion to stop a deflationary exogenous shock.

This debate eventually was synthesized in what has become to be known as the «Washington Consensus», expression coined by Williamson (1990)[6], that has led to much confusion because, as Williamson himself pointed out (2004), it seems to refer to the policies applied in the IMF and World Bank to developing countries. In practice, this is a label to identify the set of policies considered necessary for growth. The recommendations are not always the same,[7] although the core policies that have focused academic analysis were: fiscal and monetary stabilization, liberalization of prices and interest rates, liberalization of trade and capital flows, and privatization.

As noted by Boughton (2004), the consensus dominates IMF policy in the 1990s and soaks the type of recommendations made by the Fund both officially and in the institutional culture of most of the staff, with important nuances depending on the specificities of each country. Boughton quotes the words of Stanley Fischer, the IMF's First Managing

5 The IMF's Medium Term Strategy launched in September 2005, involved a comprehensive review of all policies including IMF surveillance and lending policies, as well as budgetary and governance questions. See Rato (2006) on the main elements and progress of the reform.

6 Williamson first used the term in the Conference of the Institute for International Economics in Latin America in 1989, and published it a year later (Williamson, 1990).

7 Williamson (1990) summarizes it in 10 policies to be applied in Latin America: fiscal discipline; reorientation of spending from subsidies to growth promoting social expenditures (primary health, education and infrastructure); tax reform (broader tax base and moderate marginal rates); positive and moderate real interest rates (determined by the market); competitive exchange rates; trade liberalization and elimination of quantitative barriers (protection via uniform tariffs); liberalization of capital inflows; privatization of public enterprises; market deregulation (except for consumer protection or safety reasons), and legal security of property rights.

Director between 1994 and 2001, “the consensus is a brief description of a desirable basic political orientation” (Fisher 2003, p. 6). However, they are not rules written in stone, and the IMF has questioned some of its precepts. The most controversial one has been the liberalization of capital movements, which clearly was reviewed following the Asian crisis in the second half of the 1990s.

But beyond the liberalization of capital movements, the remaining provisions had remained at the core of the recommendations of the Fund until the explosion of the crisis in 2007. In this regard, the report of the IEO about the years before the crisis, identified a group thinking within IMF staff that considered unfounded the concerns about the financial markets, because their self-correcting capacity. This belief was fueled by the strength of the financial markets of advanced economies during the crises of the 1990s and early 20th century. Even the market signals denouncing imbalances, were discarded. The prime example was the initial interpretation of the inverted yield curve in the US in 2006. Instead of pointing to the risk of recession, the IMF played it down because most indicators pointed to a sustained growth, and blamed the low long-term rates to structural factors in the market demand for bonds (mainly the high demand of institutional investors).

In summary, in 2007 there was an institutional culture in the management, the staff and the IMF line of research, guided by a general philosophy in favor of laissez-faire, and the self-correcting market forces. Therefore, the IMF was reluctant to public intervention strategies under arguments of market imperfections, and maintained a strict policy of no bailouts to avoid moral hazard problems (IEO, 2011).

However, the set of policies applied in response to the crisis – expansionary macroeconomic policies, bailouts and financial system regulation (see Chapter 1) – represent a break with this paradigm and the move to a new one, which is still in a definition process, but that is more in line with the New Keynesian economics. The new consensus calls for the effectiveness of macroeconomic policies – in the short term and under certain circumstances – and the need to intervene to correct market failures, including bailouts and greater supervision and regulation of the financial system. At the G20 Summit in London in April 2009, Gordon Brown staged the break with the neoclassical doctrine announcing in the Summit press conference, «the old Washington consensus is over» (SkyNews, 2009).

Dominique Strauss-Kahn and his two top aides, chief economist, Olivier Blanchard (who held the position since September 2008), and the Financial Adviser, José Viñals (since April 2009), were leading this changes. Blanchard is one of the main representatives of the new Keynesian school and therefore with special authority in this matter.[8] For Viñals, weighs his experience at the Banco de España, which, with more or less success, has been an institution that has maintained high standards of regulation (dynamic provisioning) and oversight (on-site supervision) of the financial system in the years before the crisis – albeit not strong enough to overcome its own financial crisis in 2012 after the double dip recession and given the huge real estate overinvestment in Spain.

In this process, the Fund has also accounted for the various regional specificities and political concerns. Here, the creation of groups of external consultants at the highest political level (including former prime ministers and ministers of finance) and with representation from academic and private sector. Five regional panels (Africa, America, Asia, Europe, Pacific, Middle East) allow the IMF to provide a greater political and regional sensitivity.

8 For example in monetary policy, Blanchard and Galí (2007) support its short – term effectiveness arguing a trade-off between inflation and employment in a context of adherent prices and frictions and inertia in the labor market adjustment. Although long-term monetary policy should be directed toward price stabilization, when the economy experiences an exogenous shock, monetary policy can be effective, especially in low growth and inflation situations (as it is the case in a crisis of confidence).

In short, as of 2009 the Fund is producing a new theoretical apparatus to define their policy prescriptions that affect the design of fiscal policy, – long term stability and a shift in spending towards sectors that enhance growth – ; a monetary policy reconciling the inflationary targets, economic growth, and the stability of the financial system; and adequate regulation and supervision of markets, with special emphasis on the financial system.[9]

4.2 A new formal decision making structure: the quotas

Formally, the decisions are taken by the IMF Executive Board, which is composed of 24 Directors representing 188 member countries through a system of "chairs" that bring together different countries.[10] The Executive Board is based in Washington D.C. and has all week sessions (normally every Monday, Wednesday and Friday) to endorse the various Funds' policies. The Executive Board performs its functions delegated by the Board of Governors, which is the highest governing body, and understands on decisions affecting the Articles of Agreement or the increase of Fund resources. The board of Governors members are usually finance ministers or central bank governors of the member countries and, in principle, only meet once a year at the Annual Meetings of the IMF and the World Bank (see Figure 4.1).

This structure is completed by the International Monetary and Financial Committee (IMFC), which normally meets twice a year (in the spring and annual meetings). The Committee consists of the Ministers and Governors of the countries that hold a chair of the Board and provides strategic direction to its work. After the emergence of the G20 in 2008 a double debate has intensified with respect to this Committee: (i) first, raising its status to Council, as provided in the Articles of Agreement, and therefore formally move from a consultative to political guidance role. (ii) Second, aligning the composition of the IMFC with that of the G20 given that in fact, the G20 has taken over the role of the political leadership of the Fund. Neither of the two decisions have still been taken. It is a debate that it is reproduced in parallel in relation with the composition of the Board (the IMFC mirror), which is addressed in section 4.3.

Therefore, in practice, the day-to-day decisions are taken by the Executive Board. The representation of different countries in the Board and their voting power is determined by their weight in the IMF, determined by the quota. In theory, this quota should reflect the economic importance of the country in the global economy. However, as we shall see, as a consequence of historical inertia, neither the quotas nor the Directors have being adapted over time to the changing economic weights of the countries in the world. In particular, they do not reflect the relative weight of emerging economies. This situation became more evident from the 21st century, and acquired visibility with the global financial crisis and the emergence of the G20, much more adapted to the relative weight of advanced and emerging countries.

The Board misalignment with the relative economic weight of countries posed a serious problem of institutional legitimacy that has been faced since 2006. The IMF began a process of governance reform for the period 2006-2008 in order to align quota and economic weight, and to increase the weight of emerging countries. The reform package included a correction in quotas in 2006 of four especially under-represented emerging countries (China, Mexico, South Korea and Turkey), and the establishment of a two years work program to reform the quota formula, and to set a new quota increase to correct the under- representation of countries.

9 Among the IMF's core documents that are shaping this new theoretical apparatus are: IMF 2010 h, i, j, and 2011d.

10 Normally the directors are elected for two years (from November 1 to October 31 every two even years). Formally they form part of the IMF and are independent of governments who appoint them, which in fact cannot dismiss them during his tenure.

Later, in 2010, the governance reform will intensify under the leadership of the G20, to approve a new quota increase of 100%, and a Board reform. These reforms have represented an historic shift in benefit of emerging economies. Here, we analyze the changes in quotas (section 4.3 deals with the Executive Board reform). Since 2006 the historic mismatch between quotas and countries' economic weight is corrected in two ways: (A) the adoption of a new formula for the calculated quota (Qc) of each country, and (B) three rounds of quota increases – 2006, 2008 and 2010 – based on the new calculated quota. Thirdly, we will see (C) the results of these reforms.

A NEW FORMULA FOR THE CALCULATED QUOTA (Qc) AFTER 60 YEARS OF STATUS QUO

The voting power of countries in the IMF is determined by the following formula:

$$V_i = Q_{ei} / 100{,}000 + BV$$

where:

- V_i is the vote of country i;
- Q_{ei} is the effective quota of country i valued at SDR, each country has one vote for every 100,000 SDRs;
- BV are the basic votes. All countries have the same number of basic votes. The 2008 reform of governance increased the number of BV (which had remained unchanged since 1944) from 250 to 750 by country. It also amends the Articles of Agreement so that the BV are fixed as percentage of 5.502% of the total voting power (instead of a fixed number).[11]

Consequently, the voting power of a country in the Fund is primarily determined by its effective quota. The effective quota is that held by the country at any given point in time, and it is different from the calculated quota, i.e., the result of applying the quota formula.

Historically there has been some inertia in the effective quotas because the successive quota increases have generally been allocated taking into account the existing effective quota (instead of the calculated one). This is largely due to the countries resistance to lose relative weight and the requirement of a qualified majority of 85% to determine any quota increases (further, requiring individual country's consent in the case of quota reductions). The result has been that effective quotas have not adapted over time to the relative weight of the countries in the world economy. The first step has been to correct the formula, and the second, the allocation criteria.

60 years without substantial changes in the formula

As part of the package of governance reforms of 2006, the Board of Governors of the Fund had set a goal to change in two years the formula for calculating the quota. This question was especially complicated, taking into account that in the previous 60 years of the IMF existence no significant changes in the formula had been achieved, despite numerous attempts, because the resistance of countries to lose weight in the institution. However, there was political consensus on the objectives: it was necessary to find a simple and transparent system for calculating the quota, and the new formula should better reflect the weight of countries in the global economy.

The 2006 calculated quota was based on five formulas and four variables: GDP, reserves, variability, and openness, as reflected in Figure 4.2. The five formulas include: the formula applied for the initial distribution of quotas among the IMF founding countries in

11 This change has allowed to correct historical weight loss of the BV, that as a result of successive quota increases have gone from representing 11.3% of the total voting power in 1945, raising up to 15.6% in 1958 and falling since to 2.1% in 2008 before the reform.

THE CALCULATED QUOTA FORMULA (1944-2008) **FIGURE 4.2**

Q_C = Max [Q BW, average of the lowest two: Q_2,Q_3,Q_4,Q_5]

The calculated quota of a member (Q_C) is the higher of: (i) the Bretton Woods calculation, or (ii) the average of the lowest two of the remaining four calculations (Q_2 a Q_5)

The Bretton Woods formula (1944)	Q_{BW}= (0.01 Y + 0.025 R + 0.05 P + 0.2276 VC) (1 + C/ Y)
The four derived formulas (a) (1963, 1983) (b)	Q_2 = (0.0065Y + 0.0205125R + 0.078P + 0.4052VC) (1 + C/Y) Q_3 = (0.0045Y + 0.03896768R + 0.07P + 0.76976VC) (1 + C/Y) Q_4 = 0.005Y + 0.042280464R + 0.044 (P + C) + 0.8352VC Q_5 = 0.0045Y + 0.05281008R + 0.039 (P + C) + 1.0432VC

SOURCE: IMF (2007a).
NOTE: Q_{BW}, Q_2, Q_3, Q_4, and Q_5: Calculated quotas for each formula; Y (GDP variable): GDP at current market prices for a recent year; R (reserves): twelve-month average of gold, foreign exchange reserves, SDR holdings, and reserve positions in the IMF, for a recent year; P (current payments): annual average of current payments (goods, services, income, and transfers) for a recent five-year period; C (current receipts): annual average of current receipts (goods, services, income, and transfers) for a recent five-year period; and VC (variability of current receipts): defined as one standard deviation from the centered five-year moving average, for a recent 13-year period.

a For each of the four non-Bretton Woods formulas, quota calculations are multiplied by an adjustment factor so that the sum of the calculations across countries equals that derived from the Bretton Woods formula.
b Formulas introduced in 1963 and reformed in 1983.

1944 (later labeled the Bretton Woods formula), and four derived formulas from this original one reflecting changes introduced in 1963 and 1983. In 1963, attending to the greater internationalization of economies and in order to give more weight to the external sector, a multi-formula scheme is introduced with two databases for the calculation (one including imports and exports and the other income and current payments). The new formulas eliminated the reserves variable and doubled the trade and variability coefficients. In 1983, the formulas were revisited recovering the reserves variable, reducing the weight of the variability, and turning to a single database calculation. The five formulas had remained steady since the VIIIth GRQ in 1983 (IMF, 2006). Therefore, this system was in practice a close inherit of the 1944 founding quota distribution.

In the late 1990s, the Fund conducted a debate on the complexity and opacity of the formulas, and the lack of correspondence with the weight of the economies in the world.[12] In 1999, an expert group was commissioned to report on this question, the Cooper report[13] (IMF, 2000a), proposing a simplification of the formula to two variables: GDP at market prices (as a proxy for the country's ability to contribute to the Fund), and variability, measured from current income and net capital flows in the long term (as a proxy for the country's external vulnerability). Between 2000 and 2003 the Board discussed several times on quotas without being able to agree other than general principles on transparency, modernization and simplification of the variables to 3 or 4 (from the existing ones).

The 2008 reform

In 2006 the discussion on quotas was reopened as part of the governance package with the, already classic, objectives of: transparency, simplification and more faithful reflection of the weight of the economies in the global economy. This time, the debate had the advantage that the technical discussion between 2000 and 2003, had narrowed the debate, and there was some agreement that only a single linear formula was needed. The approach underlying the debate was political from the beginning, assuming that there would be winners and losers of the new formula, and based on the consensus that emerging economies

12 The set of formulas combine linear and nonlinear variables, data use different time criteria, and given the system of quota determination, the effective formula applied to each country may differ, so that the weight of the different variables is not directly observable. For an analysis of the formulas and the distribution of quotas see Alberich and Martinez (2000).
13 The group was chaired by Richard Cooper of Harvard University.

should increase their weight. There was also a clear willingness on the part of Management to take it forward in a time when the label attached to the IMF was the loss of relevance of the institution, following the strengthening of regional initiatives such as Chiang Mai Initiative or the repayment of loans by Argentina and Brazil. De Rato (2006a) already anticipated it in May 2006 in a speech in Singapore, acknowledging the necessity to correct the underrepresentation of Asian countries (22% of global GDP and only 17% in quotas).

The discussions focused in the treatment of the GDP variable, which is the key variable to measure the weight of the country and its ability to contribute to the Fund. The central debate revolved around its definition as an average between GDP at market prices (mp), and their evaluation in terms of purchasing power parity (ppp). From a technical standpoint GDP ppp has the advantage of greater stability of the domestic product with respect to changes in the exchange rate (Martinez, 2008[14]). In practice, it is a calculation that is more favorable to emerging and developing economies. The political balance ended up in an estimation of GDP as a weighted average with 40% of GDP at ppp and 60% GDP at mp.

In relation to the variability variable, the net capital flows were introduced alongside with the current flows and there was a discussion about not considering the current flows in the case of monetary unions (with the intended exclusion of intra euro zone flows). The exclusion of the reserves variable, which benefits large emerging accumulators, was also discussed, given that it is not clearly linked neither to economic weight of the country, nor to its vulnerability. Some countries introduced the possibility of including variables beyond the strictly economic weight of the country, in the direction of democratizing the representation in the Fund, mainly to include a population variable by India (for clear reasons). Finally, the classic variables remained: GDP, openness (combining the two previous ones: current outflows and inflows), variability, and reserves; and adjustments were made through their coefficients in the formula (see Figure 4.3).

The GDP variable is given the highest weight in the formula (0.5), above the external sector indicators (openness, 0.3 and variability, 0.15). Thus, compared to the previous situation, the economic weight of the country becomes the primary determinant of their voting power. Indeed, compared to the five previous formulas, the approximate weight of GDP (then measured at market prices) was 29 percent, compared with estimated percentages of 50, 14 and 7 corresponding to openness, variability and reserves, respectively.[15]

The new formula was approved as part of a package that includes as the second main element the quota increase of 2008 under the new formula, which will help close the gap between effective and calculated quota. While the new formula achieves the goal of increasing the weight of emerging economies, the debate on the formula remains open. In particular, emerging economies still require a higher weight to the GDP ppp. In fact, a possible redefinition of the formula was part of the discussion for the 2010 quota increase. At stake was a substantial increase in quota (eventually 100%) and all countries wanted to position with a larger calculated quota to improve their participation in the deal.

Finally, the 2010 quota increase did not to touch the formula of 2008, among other reasons not to hinder the discussion on the distribution of the quota increase, in itself quite difficult (the formula was a negotiating red line for European countries). The compromise was achieved because as we will see, the 2010 quota increase took into account other distribution criteria in addition to the 2008 formula. Furthermore, a commitment was reached to review the formula by January 2013, and to advance the next GRQ to January 2014.

The quota formula review of 2013 has concluded with no agreement on a new formula. The discussions are expected to progress in the second half of 2013/14 running

14 For a discussion of the implications of the 2008 quota reform and its impact on Spain see Martinez (2008).

15 This is an approximation considering the nonlinearity of the formulas and the high correlation between variables (IMF, 2006).

THE 2008 FORMULA

FIGURE 4.3

$$Q_C = (0.5*Y + 0.3*O + 0.15*V + 0.05*R)^k$$

Where

Q_C : calculated quota share;

Y (GDP variable): a blend of GDP converted at market rates and ppp exchange rates averaged over a three year period. The weights of market-based and ppp GDP are 0.60 and 0.40, respectively;

O (openness): the annual average of the sum of current payments and current receipts (goods, services, income, and transfers) for a five year period;

V (variability): variability of current receipts and net capital flows (measured as a standard deviation from the centered three-year trend over a thirteen year period);

R (reserves): twelve month average over a year of official reserves (foreign exchange, SDR holdings, reserve position in the Fund, and monetary gold); and

k: a compression factor of 0.95. The compression factor is applied to the uncompressed calculated quota shares which are then rescaled to sum to 100.

SOURCE: IMF (2008).

TYPES OF QUOTA INCREASES

FIGURE 4.4

Regular or ad hoc	**General Reviews of Quota (GRQ).** Should be held at least every five years and affect all members.	**Ad hoc increases.** Affect a country or group of countries. They may be decided at any time at the request of the country, and can be performed at the moment of a general review or outside it. (a)
Allocation or distribution criteria	**Equiproportional allocation.** Quota increases are allocated in proportion to the existing quota distribution at the time of the increase.	**Selective allocation.** Is performed according to the criteria determined by the Board. In general, selective increases are based on calculated quotas, and so it has been since the VIII GRQ in 1983. On other occasions, the Board has chosen to prioritize different criteria searching to benefit a group of countries especially under-represented, as was also done in 2010. (b)

SOURCE: Based on IMF information.

a Article III, Section 2) provides that "The Board of Governors shall proceed at intervals not exceeding five years to a general review of quotas of member countries and, if deemed appropriate, propose adjustments thereof. It may also, at its discretion, consider at any other time at the request of a member, the adjustment of its quota" (IMF, 1993).

b For instance, in the selective increase of the sixth General Review in 1976, the Board decided to double the aliquot of the major oil exporting countries, while protecting the share of developing countries. In the XI Review in 1998, three-fifths of the selective component was distributed according to the calculated quota and the rest went to 38 countries especially misaligned, those with a ratio between actual and calculated quota above the unit (IMF, 2001).

parallel to the quota increase of 2013 and once the new set of data for calculating the quota is available in mid 2013. Here, it can be expected some further progress in the direction of greater weight for the GDP variable, the discussions are focusing on eliminating the variability variable, and establishing some caps in the openness variable.

B FROM THE EFFECTIVE TO THE CALCULATED QUOTA AS THE MAIN ALLOCATION CRITERIA

No matter how good the design of the quota formula, its impact on the country's weight in the Fund is not relevant if not transferred to its actual quota. The calculated quota determines the theoretical weight resulting from applying the formula. However, in practice, the actual weight, or effective quota, does not necessarily coincide with the calculated quota. In fact, the two quotas rarely coincide and the level of over- or under-representation of countries is measured by the difference between the two (country under-represented if calculated quota is greater than the effective one, and vice versa).

The difference between the effective and calculated quota has remained over time because the successive quota increases have normally been allocated taking into account the effective quota at the time of the increase (instead of the calculated quota), thus maintaining the existing status quo. In this respect, Figure 4.4 shows the different types of allocations of quota increases.

Quota increase can be distributed by any combination of these four types of quota increases. In order to reduce the misalignment between calculated and effective quota, quota increases should be either: general increases with a dominant selective allocation, and/or ad hoc increases that benefit under-represented countries (i.e. those for which calculated quota exceeds the effective one). However, historically in the Fund the primacy has been given to equiproportional quota increases, so that there has been an inertia to maintain the status quo of the representations of each country at their entry into the IMF, with minor alterations (see Figure 4.5). The result is that the economies for which the calculated quota has grown more – i.e., those with more dynamic growth and a greater presence abroad – have not increased their relative weight in the Fund in line with their greater economic weight in the global economy. This situation is significantly corrected from 2006.

2006-2010: the correction of the historical misalignment between calculated and effective quota

The governance reform of 2006-2008 included two rounds of ad hoc quota increases to the benefit of all infra represented countries. As a first step, to signal the willingness to reform, at the Annual Meetings in Singapore in 2006, an ad hoc quota increase of 1.8% (SDR 3,800 million) was agreed, allocated to four especially under-represented emerging countries: China, South Korea, Mexico and Turkey.[16] A deadline was also set to decide on a new quota formula and to complete a second phase of quota increase by 2008. Before term, in April 2008, the Board completed the reform of the formula and a second ad hoc quota increase of 9.7% (SDR 20,500 million) for other 135 under-represented countries. Figure 4.6 shows the criteria used for the ad hoc increases in 2006 and 2008.

The 2006-2008 reform is an important step in reforming the governance structure of the IMF that reduces the historical representation gap accumulated by emerging economies. However, emerging countries continued to demand further changes, especially in relation to the structure of the Board. As noted by Steinberg (2009), the reforms introduced between 2006 and 2008 were a step in the right direction, but not enough to bolster the institutional legitimacy of the IMF, presenting the crisis as an opportunity to continue reforms in the Fund and the global economic governance.

Indeed, the global financial crisis has prompted a new round of governance reforms developed primarily from the G20 Pittsburgh Summit (September 2009). After a year of negotiating without results in the Fund's Board, in October 2010, the G20 Ministers and Governors in Seoul reached a commitment,[17] later formalized in the Board's meeting of November 5, advancing the XIVth General Review of Quotas. This 2010 reform includes as main components:

— A doubling of IMF quotas from SDR 238,400 million up to around SDR 476,800 million (approximately US$ 755,700 million). Most of this increase will come from a rollover form the NAB, that had been reinforced after the G20 of April 2009.
— A redistribution of quotas combining a selective component (60%) and an ad hoc component (40%, see Figure 4.7).
— Configuring an Executive Board of 24 constituencies with the commitment of reducing two chairs held by advanced European countries.
— An adjustment commitment over time to avoid perpetuating the status quo of the quotas and the Board. Specifically, to conclude a new revision of the formula by January 2013 and to advance the XVth GRQ to January 2014 (two years earlier than implied). There is also an agreement to review the Board composition every eight years.

16 China moves from SDR 6,369.2 to 8,090.1 million; Mexico from SDR 2,585.8 to 3,152.8 million; South Korea from SDR 1,633.6 to 2,927.3 million; and Turkey from SDR 964.0 to 1,191.3 million.

17 The decision was discussed in an specific G20 working group on IMF quota and governance reform.

The table reflects the Fund's GRQ. The successive Reviews until the XIII[th] in 2008 did not allow for a substantial correction between calculated and effective quota because there was a predominance of equiproportional distribution of the quota increases.

In general, in the successive enlargements until 2008, the equiproportional distribution of the quota increase has dominated; it has always been higher than the selective component. The exceptions have been the VI and VIII Reviews, in which the percentage of the selective increase was respectively equal and greater than the equiproportional increase.

Furthermore, although over the years there have also been a series of ad hoc increases, its scope has been limited and they have not allowed correcting significantly the misalignment. The agreements for ad hoc increases are traditionally harder to reach by the Board because they favor a small number of countries at the expense of reducing the relative weight of the rest. After some initial adjustments to correct what was considered an original infra representation at the entry in the Fund of several countries, since 1969, ad hoc increases have been rare and have affected a small number of countries (mainly to increase the weight of Japan, Saudi Arabia and China, see Figure 4.6).

In short, during the first 60 years of the IMF, successive quota enlargements have tended to prioritize the allocation based on the existing quotas (rather than the calculated quota). The result is that the gap between country's quotas and their position in the world economy, as measured by the calculated quota, has been increasing.

GRQ (1950-2010)

GRQ	Year	Total increase (%)	Total quota (SDR mill.)	Allocation criteria	
				Equiproportional (%)	Selective (%)
I	1950	—			
II	1955	—			
1958/59 (a)	1959	61	14,507	50	11
III	1962	—			
IV	1965	31	21,197	25	6
V	1970	35	28,983	25	10
VI	1976	34	39,561	17	17
VII	1978	51	59,595	50	1
VIII	1983	48	88,508	19	29
IX	1990	50	141,399	30	20
X	1995	—			
XI	1998	45	210,249	34	11
XII	2003	—			
XIII	2008	—	[238,399] (b)		
XIV (c)	2010 (c)	100	476,798		60 [+40 ad hoc] (d)
XV	2014 (e)				

SOURCE: Martínez (2008), IMF.

a General Review outside of the quinquennial reviews.
b IMF quota after the 2006 and 2008 ad hoc increases.
c Review subject to ratification, expected for 2013.
d 60 percent is a selective increase based on calculated quota and the remaining 40 percent, through ad hoc distributions.
e The XV[th] GRQ was advanced to 2014.

AD HOC QUOTA INCREASES (1947-2008) FIGURE 4.6

Year	Criteria
1947-1969	**Correction of the Bretton Woods Quotas.** During these years, a series of ad hoc increases are conducted to correct initial Bretton Woods quotas of up to 23 countries for which quotas were considered to be too low.
1970-2006	**Five political adjustments.** During this period there occurred five specific increases to correct misalignment of as many countries (a): — **Japan** (1990) receives an ad hoc increase in 1990 that aligns its quota with Germany (France and UK quotas were also aligned). This increase was coordinated among the G7 countries so that the total group quota of these seven countries would not suffer modification. — **China** (1980 and 2001) got a raise in 1980 to correct its original quota, at a time of change in its representation from Taiwan to Beijing. The quota raised again in 2001 after the resumption of sovereignty over Hong Kong. — **Saudi Arabia** (1981) received a quota increase in 1981 linked to the desire to strengthen the IMF's liquidity position during the debt crisis before it could complete the VIII revision. Saudi Arabia moved to have a quota share of 3.5% in the IMF (from SDR 1,040 million to 2,100 million). — **Cambodia** (1994) has a quota increase associated with the resumption of its relations with the Fund.
2006 and 2008	**Correction of under-representation.** In the context of the 2006-2008 governance reform, two ad hoc increases totaling 11.5% of the total quota were undertaken, benefiting the 135 under-represented countries, i.e. those for which calculated quota according to the 2008 formula was higher than the effective quota. This increase was undertaken in two phases: — **First, in 2006 (the Singapore reform):** an increase of 1.8% quota (SDR 3,810 million) is decided benefiting of four highly under-represented emerging countries, i.e., those for which the effective quota was less than their weight in the global economy taking into account any of the variables involved in the formula (GDP, trade, reserves and variability): China (increased its share in SDR 1,720.9 million), South Korea (1,293.7), Mexico (567), and Turkey (227.3). — **Second, in 2008:** an additional increase of 9.7% of the total quota for the benefit of the 135 under-represented countries at the IMF. This increase was distributed in proportion to the level of under-representation, with the following exceptions: — **Partial renounce of advanced economies:** under-represented members of the G7 (US, Japan, Germany and Italy) partially renounced to the increase that they could have gotten. For these countries an adjustment is made in the same proportion to maintain the voting power of the US at the level it enjoyed after the first phase of the reform. Ireland and Luxembourg also renounced to part of the increase that they qualified for (limiting such increase to 50%). — **Protection of emerging countries:** there is a guarantee of a minimum increase of 40% of quota for highly misaligned emerging countries, measured by a 1.75 threshold in the ratio of the country´s share in the GDP ppp variable compared to its effective quota on effective quota. It also provides a safeguard for the four countries benefiting from the first phase (China, Mexico, South Korea and Turkey), with a minimum increase in the second phase of 15%.

SOURCE: Own elaboration based on IMF data.

a Of these five revisions, only one coincided with a GRQ – the increased quota of Japan in 1990 – with the IXth GRQ.

C RESULTS OF THE 2006-2010 REFORMS

The three quota increases decided in 2006 (Singapore), 2008 (Washington) and 2010 (Seoul)[18] have as main results a gain in the weight of the emerging and developing countries and a correction of under-representation, resulting in a new ranking of voting power in favor of emerging countries.

The increased weight of emerging and developing countries (EMDCs)

The joint loss in quota share of advanced economies – and symmetrically the gain of EMDCs[19] – is particularly relevant in terms of the calculated quota. On this scale, the loss of advanced economies is 8.6%, meaning that sum of the calculated quota of advanced economies goes from 71.07% in 2006 to 62.47% after the new formula adopted in 2008.

18 The increase in 2010 is still pending ratification, a process that requires parliamentary procedure in most IMF members. It is estimated that the ratification will be completed in 2013/14.

19 There are no established criteria for classifying among advanced, emerging and developing economies. Here we use the IMF classification following Nielesen (2011), which includes as advanced countries: Australia, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, South Korea, Luxembourg, Malta, Netherlands, New Zealand, Norway, Portugal, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, and USA. For a detailed analysis of the different categorizations of countries by the IMF, World Bank and United Nations see Nielsen (2011). Data on quotas for each country from IMF (2010o).

DISTRIBUTION OF THE FOURTEENTH GENERAL QUOTA REVIEW [1]

FIGURE 4.7

In October, the G20 sets a 100% increase in IMF quota (SDR 238,400 million) as part of the XIVth General Review. The initial 60% is a selective increase (i.e., based on the calculated quota). The remaining 40% is an ad hoc distribution based on the GDP variable of the 2008 formula.[2] Specifically, the ad hoc increase establishes a uniform proportionate reduction in the difference between: the weight of the country according to the GDP variable and its effective quota after the selective increase. This increase is nonetheless adjusted by the following corrections:

— *Three limits:* (1) for the advanced countries the reduction will be only 50% and only benefit those which are under-represented under the formula; (2) the maximum quota increase per country is 220% (this limit will prevent that China's quota exceeds that of Japan); (3) the drop in relative weight by country is limited to 30% and a maximum of 0.85 percentage points (this limit protects Saudi Arabia).

— *Triple protection:* (1) countries cannot change from over- to under-representation under either the formula or the GDP variable; (2) the least developed countries maintain at least the post 2008 reform quota,[3] (3) protection of the gains from the selective increase of countries under-represented under the formula, but not under the GDP variable.

— *Transfers between countries:* Certain adjustments are made to fit quotas from certain countries: France, Germany, Italy and the UK give a 0.05% share to Spain (which allows it to reach a 2.0% share); Singapore gives 0.09 to Tonga (to protect the post-2008 level); 1.56 from the USA to Saudi Arabia (avoiding its sharp fall in quota); and the advanced countries of the G20 concede 1.20% to cover the protection of LICs.

1 Source: Based on IMF (2010o, 2010p).
2 The GDP is a weighted average of the GDP measured at market prices (60%) and in purchasing power parity (ppp, 40%).
3 This includes PRGT eligible countries with a per capita income below US$ 1,135 in 2008 (double in the case of small economies), plus Zimbabwe.

This is due to the increased weight of the new GDP variable and to its ppp component, which benefit emerging and developing countries. However, the shift in quota is not so obvious when observing effective quotas. In this case, the loss of quota share in advanced countries (excluding South Korea) is about 3.4%, that is, the sum of the effective quota of the advanced economies goes from 62.7% in 2006 to 59.3% after the reform approved in 2010.

Now the G20 had set two objectives for the 2010 quota increase: (i) a transfer of at least 5% of effective quota to emerging and dynamic developing countries, and (ii) a transfer of 5% from under- to over-represented countries (G20, 2009).[20] This objective is achieved from defining a subset of 32 countries taking into account the GDP ppp variable, the so-called dynamic emerging market countries.[21] The result for this subset of countries is an effective quota increase of 8 points, moving from 17.2% of the total quota in 2006 to 25.2% in 2008.[22] Here again, the higher weight of the new GDP variable in the formula, and the use of this variable for the ad hoc increase in 2010 (to account for 40% of the distribution), will play in favor of emerging countries.

20 The statement from the G20 Pittsburg language was very vague. The result was an intense debate within the G20 on the level and the target to be pursued. Emerging countries advocated the transfer from advanced to emerging and advanced economies, particularly Europeans, defended the criterion of representation. Finally it was decided to keep both criteria.
21 To measure the dynamism different criteria were discussed, such as, the contribution to global growth between 2004 and 2008 (higher than 0.5% or than the average of emerging countries). Finally, it includes a comprehensive list of 32 countries whose weight in the world GDP ppp divided by its effective quota in the Fund after the 2008 reform, exceeds the unity. The 32 countries are: Albania, Angola, Azerbaijan, Belarus, Bhutan, Botswana, Brazil, Cambodia, China, Colombia, Dominican Republic, Ecuador, Egypt, Equatorial Guinea, Estonia, Ethiopia, Guatemala, India, Indonesia, Iran, Kazakhstan, South Korea, Lithuania, Mexico, Nepal, Peru, Philippines, Poland, Russia, Thailand, Turkey, Vietnam (IMF, 2010k).
22 Most of this increase is concentrated in eight countries that absorb 7.7 points of the increase: Brazil, China, India, South Korea, Mexico, Poland, Thailand and Turkey.

CHANGES IN THE EFFECTIVE QUOTA: PRE-SINGAPORE (2006) VS. POST-SEOUL (2010) FIGURE 4.8

Percentages

15 countries with the highest quota increase			15 countries with the highest quota decrease		
Country	Increase $Q_e^{10} - Q_e^{06}$	Q_e^{10}	Country	Decrease $Q_e^{10} - Q_e^{06}$	Q_e^{10}
China	3.414	6.394	Saudi Arabia	-1.172	2.096
South Korea	1.036	1.800	Belgium	-0.810	1.345
Brazil	0.896	2.316	France	-0.797	4.227
India	0.806	2.751	United Kingdom	-0.797	4.227
Mexico	0.659	1.869	Canada	-0.668	2.312
Spain	0.574	2.000	Netherlands	-0.583	1.832
Turkey	0.526	0.977	Germany	-0.500	5.586
Singapore	0.412	0.816	Venezuela	-0.463	0.781
Ireland	0.332	0.724	Switzerland	-0.408	1.210
Japan	0.236	6.464	Argentina	-0.321	0.669
Poland	0.219	0.859	Nigeria	-0.305	0.515
UAEmirates	0.199	0.485	Kuwait	-0.240	0.406
Thailand	0.168	0.674	South Africa	-0.234	0.640
Luxembourg	0.146	0.277	Ukraine	-0.220	0.422
Greece	0.124	0.509	Iraq	-0.207	0.349

SOURCE: IMF (2010p).
NOTE: Q_e^{10}: effective quota in 2010 after the Seoul increase (it includes quota 2008 increase). Q_e^{06}: effective quota in 2006 prior to the Singapore quota increase.

On the figures by country, as shown in Figure 4.8, the big winners in effective quota and voting power after the reform are a subgroup of dynamic emerging economies, including China, Brazil, South Korea, India, Mexico, Turkey, and Singapore; and some advanced economies that were especially under-represented, such as Spain or Ireland. On the other side of the coin, the losers are major advanced economies (Belgium, France, UK, Canada, Netherlands, Switzerland and Germany) and some emerging economies with high over-representation, especially Saudi Arabia and Venezuela.

As a result of these changes in quotas, the Fund has a new ranking of the voting power in favor of emerging countries, and especially of the four BRIC countries, which rank on the top 10 with higher weight in the Board, together with G7 countries (except Canada).[23] Between 2006 and 2010 there is a rearrangement in the top 10 countries by IMF quota: India and Brazil enter the list, and Canada and Saudi Arabia leave it (see Figure 4.9). Similarly, Venezuela and Sweden fall from the top 20 quota ranking, and Turkey and South Korea enter the list (Turkey, a top 20 world economy by GDP, was only ranked 42 in IMF's quota before the reform). The new quota ranking is better aligned with the top 20 economies in terms of GDP.[24]

The correction of misalignments

The adjustment of the formula and the quota increases have also allowed a very significant correction of the misalignment between effective and calculated quota. In aggregate

23 It should be noted with respect to the European Union countries, that there is also a realignment between the top five economies (Germany, France, UK, Italy and Spain) in GDP and IMF quota terms, since the quota reform allows for a fall of the Netherlands and Belgium to the sixth and seventh quota places, two countries that had traditionally focused a large part of the European over-representation criticism.

24 The exceptions being Saudi Arabia and Belgium, with a presence in the IMF above their weight in the global economy because of their historical significance in the Fund and, in the case of Saudi Arabia, through a series of ad hoc offsets to avoid its falling quota in the IMF (see Figure 4.6).

EFFECTIVE QUOTA RANKING: 2010 VS. 2006 FIGURE 4.9

Top 20 countries by effective quota 2010			Top 20 countries by effective quota 2006		
País	Effective quota (%)	GDP ranking (a)	País	Effective quota (%)	GDP ranking (b)
USA	17.407	1	USA	17.380	1
Japan	6.464	3	Japan	6.228	2
China	6.394	2	Germany	6.086	3
Germany	5.586	4	France	5.024	6
France (c)	4.227	5	United Kingdom	5.024	5
United Kingdom (c)	4.227	6	Italy	3.301	7
Italy	3.161	7	Saudi Arabia	3.268	25
India	2.751	12	Canada	2.980	8
Russia	2.706	10	China	2.980	4
Brazil	2.316	8	Russia	2.782	11
Canada	2.312	9	Netherlands	2.415	16
Saudi Arabia	2.096	23	Belgium	2.155	18
Spain	2.000	11	India	1.945	12
Mexico	1.869	14	Switzerland	1.618	20
Netherlands	1.832	16	Australia	1.514	15
South Korea	1.800	15	Spain	1.426	9
Australia	1.379	13	Brazil	1.420	10
Belgium	1.345	21	Venezuela	1.244	35
Switzerland	1.210	19	Mexico	1.210	14
Turkey	0.977	17	Sweden	1.121	19
TOTAL	**72.059**		**TOTAL**	**71.121**	

SOURCE: IMF (2010p).

a Indonesia and Poland occupy respectively positions 18 and 20 in the world GDP; and positions 21 and 23 in effective quota.
b South Korea and Turkey occupied positions 13 and 17 on the 2006 GDP ranking, and only 28 and 42 in the effective quota ranking.
c France and the UK maintain equal quotas.

terms, the absolute total misalignment (the sum of the differences in effective and calculated quotas in absolute terms) decreases from 32.85% in 2006, to 10.62%, after the amendment passed in Seoul. As seen in Figure 4.10, there is a big drop in the absolute levels of misalignment. With the exceptions of China (still under-represented by 1.52%) and Saudi Arabia (over-represented in 0.76%), for other countries the difference between actual and calculated quota is reduced below 0.5%, when in 2006, up to 17 countries exceeded this limit.

Interestingly, despite the reforms, there are two groups of six countries, that remain – albeit at lower levels – on the lists of the ten countries with the highest infra (China, South Korea, Spain, Ireland, Luxembourg, Singapore) and over-representation (Saudi Arabia, Brazil, USA, France, India, Venezuela). This reflects the historical inertia problem in the misalignment. In this sense, in the future the successive revisions, starting with the XVth Review, the quota increases should aim to continue the progress in correcting misalignments [25].

4.3 New formal decision-making structure: a more balanced Executive Board between advanced and emerging countries

Beyond the voting power of each country, the decision-making process at the IMF is formalized in Executive Board meetings. Each director holds the sum of the voting power of

25 The numbers are based on 2009 data. In 2013, the Fund updates this numbers with important changes in the effective quotas reflecting the different growth patterns after the global financial crisis.

RANKING OF UNDER- AND OVER-REPRESENTATION: 2010 VS. 2006 FIGURE 4.10

15 most under-represented countries				15 more over-represented countries			
2010		2006		2010		2006	
Country	Q_e-Q_c (%)	Country	Q_e-Q_c (%)	Country	Q_e-Q_c (%)	Country	Q_e-Q_c (%)
China	-1.523	China	-3.157	Saudi Arabia	0.759	Saudi Arabia	2.238
UK	-0.436	Korea	-1.748	France	0.438	USA	1.096
Singapore	-0.379	Singapore	-1.525	USA	0.420	Russia	1.080
Ireland	-0.353	Ireland	-1.268	India	0.348	France	0.895
South Korea	-0.308	Luxembourg	-1.238	Venezuela	0.297	Venezuela	0.817
UAE	-0.282	Spain	-0.811	Congo	0.189	India	0.658
Spain	-0.236	Japan	-0.783	Italy	0.169	Argentina	0.622
Russia	-0.232	Germany	-0.764	Zambia	0.166	Nigeria	0.461
Luxembourg	-0.226	Malaysia	-0.679	Brazil	0.163	South Africa	0.415
Turkey	-0.171	Mexico	-0.631	Zimbabwe	0.132	Brazil	0.351
Thailand	-0.115	Netherlands	-0.482	Ghana	0.105	Ukraine	0.341
Germany	-0.092	Thailand	-0.403	Kuwait	0.091	Australia	0.309
Poland	-0.090	Turkey	-0.300	Iran	0.090	Kuwait	0.291
Kazakhstan	-0.085	Denmark	-0.271	Pakistan	0.084	Pakistan	0.288
Greece	-0.063	Austria	-0.253	Iraq	0.082	Libya	0.283

SOURCE: IMF (2010p).
NOTE: Q_e: effective quota. Q_c: calculated quota.

all the countries they represent, without the possibility of issuing a dissent vote by country.[26] Therefore, the influence of a director exceeds the voting power of his country. They represent the other countries in their constituency, and are in charge of coordinating constituency positions before the Board, staff and management.[27] In fact, the voting power of a country is more important because of the possibility to appoint an Executive Director, rather than the weight of the vote itself.

In practice, there is no voting in the deliberations of the Board.[28] The decisions are expressed in the Board's assessment –the so-called "summing up", a sort of summary of the Board discussion– or the adoption of specific text proposed by the staff. This assessment is usually reflected in a word code expressing the number of Directors that support the decision, whose voting power warrants the required majority.[29] Thus, the decision arises as agreed by the Board, without nominally identifying the directors that have been more or less in favor of it.

In the working routine of the Board, alliances and coordinated positions occur between different directors; either on a regular basis, such is the case of regular meetings by European directors or (less frequently) G7 countries; or on ad hoc meetings, to defend positions on a specific theme.[30]

26 If a country or several within the constituency does not agree with the decision of the director, the dissent can be brought up at the Board for the record, but the vote cast cannot be split.

27 Regular meetings of the IMF include meetings every week, usually on Monday, Wednesday and Friday in morning and afternoon sessions.

28 Voting rarely occurs and when it does happen, there are usually abstentions rather than negative votes.

29 The most commonly used terms are as follows (in parentheses the meaning): a few (2 to 4 Directors), some (5 or 6), several (6 to 9), many (10 to 15), the most part (15 or more), the Directors (supported by all or nearly all Directors with broad majority vote), a significant minority or a majority of the Board (indication of the voting power necessary to block or approve a decision), (IMF, 2009d).

30 Directors belonging to the EU countries are grouped into a group called EURIMF having almost weekly meetings at the IMF. For a detailed analysis of the structure and alliances and weight of individual directors see Woods and Lombardi (2006).

In short, in practical terms, in the exercise of the formal power in the Board, it is more important for a country to hold the position of Executive Director, than the percentage of voting power it has (notwithstanding that the two are connected).

However, the reorganization of the Board is politically more complex than a quota increase.[31] Historically, there have been few rearrangements – less than quota increases – normally associated with the participation of new members, such as the increase in the number of chairs with the entry of Switzerland and Russia in 1992. But the structure has remained stable around a group of directors representing advanced economies and, more specifically, American and European directors (see Figure 4.11). The 2010 reform driven by the G20 also will rebalance the Board in favor of emerging economies.

A THE REFORM OF 2010: ENDING THE EUROPEAN "ROLLING-PIN"

Since 2000, as part of the discussion of the NIFA, the discussion on the composition of the Board intensifies, with special emphasis on the excessive weight of European directors. This debate parallels the one on quotas and, as we saw before, there were no tangible results up until 2006-2008, and especially until 2010. In 2008, the African constituencies were allocated an additional Alternate Director, facilitating the rotation in constituencies with more than twenty countries.

In the fall of 2010, under the South Korean G20 presidency, Europe yielded to international pressure and committed to reduce by two the number of its directors at the Board. The debate starts in the summer of 2010 when the US makes effective a threat that informally had been announced since 2006: not to renew a Board with twenty four directors (the Articles only ensure twenty, the enlargement to twenty four has to be approved by the Board). In theory, the burden of the adjustment down to twenty directors would fall on the four constituencies with less weight at the time (Brazil, India, Argentina and Togo), but the US pressure, with the BRIC support, was directed to Europe. Finally, after a tour by Dominique Strauss-Kahn to the major European countries, the October 2010 ECOFIN agreed to give up two chairs of advanced European countries in 2012 in favor of emerging and developing countries.

This commitment was formalized at the October meeting of Ministers and Governors of the G20 in which three additional decisions on the Board were taken: (i) a move to an all-elected Board (eliminating the right to own a chair of the top five countries by quota); (ii) a Board of twenty four directors, and (iii) to review the Board's composition every eight years. The decision has been delayed until 2014, pending the US Congress approval of the whole IMF quota and governance package.

In the fall of 2012, the Europeans have advanced part of their commitment, by shifting 1.62 chairs from advanced to emerging European countries, including: a merger of the Dutch and Belgian chairs, with Austria, Eastern Europe and Turkey holding the freed chair; a 50 per cent rotation between Switzerland and Poland (previously the former held the Director position permanently); and a rotating scheme with Baltic countries in the Nordic constituency.

Therefore, so far there has been an internal concession within Europe (from advanced to emerging Europe). The question remains whether there should be other regions benefiting in the Board. In this respect, beyond the general consideration that the IMF is an institution of countries and not regions, it is interesting to consider two divides that do have an influence on the Board's decision making: the advanced/emerging countries divide, and the regional structure.

---

31 A clear example is Japan that failed to hold an Executive Director until 1970 given the political difficulties to increase its quota as a defeated country in the second world war.

In the initial composition of the IMF Board, the relative weight favors to the victors of the Second World War and, especially, the US who held one third of the voting power of the institution with 39 member countries. The countries with greater voting power were the US (31%), the UK (14%) Soviet Union (13%), China (6%), France (5%), and India (4.5%). However, over the 1950s and 1960s, a new balance takes place around the countries that form the G7 group in 1976 (initially G6 in 1975: Germany, USA, France, Italy, Japan and United Kingdom, with Canada joining in 1976).

Extending the Board. The 1960s and 1970s witness a broad internationalization of the IMF (Boughton, 2001). Member countries are doubled, from 69 in 1960 to 138 in 1978, coinciding with the independence of European colonies in Africa. Along with this increase in the number of countries, the number of seats in the Board moved up from the initial twelve to twenty in 1964. During these years a structure is set in which five of the G7 countries have their own chair, and the remaining two, Italy and Canada, share their constituencies with third countries, but maintaining permanently the figure of the director. In the 1990s, the IMF would acquire a global scale with the entry of 40 new countries, mainly former Soviet republics. By the end of the 20th century, the Fund is already global reaching 183 members – rising up to 188 in 2012, with South Sudan the latest country to join in 2012 –, with only a few small or isolated countries remaining for membership, most notably Cuba and North Korea (Boughton, 2001). During these years, the Board consolidates a structure of 24 directors, a number that has remained stable since 1992, when Switzerland entered the IMF with a new chair shared with third countries (with Poland as the main partner).

Protection in the Articles of Agreement. The Articles (Article XII Section 3.b) protect the five countries with the highest quota, by entitling them to appoint a director, with the remaining fifteen being elected from among the rest of the member countries. With the 2010 governance reform, the G20 has agreed to eliminate this exception by establishing an all-elected Board. In any case, in practice, the largest quota members will most likely keep single-country constituencies.[1] The qualitative weight of the largest members is further anchored with the requirement of a qualified majority of 85% for decisions affecting IMF policies or changes in the Articles, which gives a veto power to the US (all other countries must forge alliances to reach blocking minority).

The table reflects single-country constituencies. In addition to the top five countries by quota, three other, Saudi Arabia, China and Russia, get their own "seat" in the Fund in 1978, 1980 and 1992, after various processes of political negotiation with a crucial support of the G7, and especially of the US[2]. While the entry of China and Russia in 1980 and 1992 partially rebalances a traditional dominance by G7 countries (five of which hold a single country chairs), it will not be until the 2010 reform that more clear rebalancing in favor of emerging countries, takes place at the Board.

1 In a Board with 24 chairs, by simple aritmetic, any country with at least 4.2% (≈ 100/24) has a sufficient majority to elect Director.
2 Nomani (2007, 2008) describes the political process of Russia and Switzerland to get a seat in the Board.

SINGLE COUNTRY CONSTITUENCIES AT THE IMF BOARD

Country	Year	2010 voting power
Countries with the right to occupy a "chair" (those with the highest quota, following Art. XII section 3.b)		
USA	Since 1945	16,479
United Kingdom	Since 1945	4,024
France	Since 1945	4,024
Germany	Since 1960 (between 1945 and 1960, China occupied the single country constituency)	5,308
Japan	Since 1970 (between 1945 and 1970, India occupied the single country constituency after the USSR renounced to be a member of the IMF; in 1970 Japan's quota surpassed that of India)	6,138
Countries under the election procedure but with single-country constituency		
Saudi Arabia	Since 1978. Saudi Arabia is compensated because the riyal was the second most used currency after the dollar in IMF transactions	2,010
China	Since 1980. Linked to the official incorporation of People's Republic of China in the Fund (China was previously represented through Taiwan)	6,071
Russia	Since 1992. Russia negotiated a single country constituency and later joined the G8	2,587
TOTAL		**46,641**

SOURCE: IMF, Momani (2007).

IMF BOARD: ADVANCED-EMERGING DIVIDE (2010-2012) FIGURE 4.12

	Executive Directors			Voting power	
	Country leading the constituency	# of countries (country/ chairs ratio)	% of directors	pre-2006	post-2010
Advanced economies	11 [13] (a): G7 (Canada, France, Germany, Italy, Japan, UK, US) + Netherlands/Belgium, Nordics, Switzerland/Poland (b), Austria/Turkey (b), [Spain], [[Australia]]	63 (5.7)	45.8 [54.2]	62.06 [70.08]	58.22 [67.06]
Emerging economies	11 [9] (a): BRIC (Brazil, Russia, India, China) + Argentina, Thailand, Saudi Arabia, Egypt, Iran, [Mexico/Venezuela], [[South Korea]]	78 (7.1)	45.8 [37.5]	33.35 [25.33]	36.46 [27.62]
Low income countries	2 Sub-Saharan African constituencies: mostly English and mostly French speaking constituencies	43 (21.5)	8.4	4.44	5.12

SOURCE: IMF.

a In brackets, situation when Spain and Australia lead their constituencies, without them, when it is Mexico/Venezuela and South Korea, respectively, that lead them.
b Starting in 2014, the constituencies to be lead by Poland and Turkey would also increase the emerging countries group.

As seen in Figure 4.12, it is not clear that advanced economies are over-represented, rather the opposite when considering quota. Even in the case where they occupy 13 seats (when Spain and Australia take the position of director in their mixed constituencies), the percentage of seats occupied by advanced economies is lower than the quota of the advanced economies in the Board (and vice versa, emerging and developing economies percentage of Directors exceeds their quota weight). However, there are other considerations at play given, as we have seen, the relevance of holding the position of director, which goes beyond the quota weight. For instance, if we consider the ratio of number of countries by chair, advanced economies are in a clear position of advantage.

By region, Europe holds the highest number of Executive Directors at the IMF (Figure 4.13). After the rearrangement of European constituencies in 2012, the region holds eight permanent directors of which four correspond to countries with permanent Director (Germany, France, Italy, United Kingdom), and four rotate among European countries (Switzerland/Poland, Netherlands/Belgium, Nordic countries, Eastern Europe/Turkey). In addition, when Spain takes the chair that shares with Mexico and Venezuela (two out of six years), Europe can have up to nine directors, i.e. 37.5% of the total of 24 seats. In other words, Europe has 8 1/3 (or 34.7%) of the chairs of the Board; in the case of the EU and the euro area, these figures are respectively 7 1/3 (30.5%) and 5 1/3 (22.2%). Europe is also the region with the best ratios of number of countries per chair. The two regions infra represented (by comparing weight in number of directors per quota post-2010) are Asia-Pacific and America, albeit in the latter is mainly due to the high weight of the US. Africa, even with low quotas, is facing the problem of excessive number of countries per chair.

Interestingly, if the goal was to seek a regional realignment of the Board, following a post-2010 quota criteria, with Europe weighing 32% of the total voting power, it should concede only about two thirds of chair and go from 8 1/3 to 7 2/3, (just as the EU should descend from 7 1/3 to 7 and the euro area remain on 5 1/3). A large part of this concession would have already been achieved when considering that Turkey will rotate as director half of the years in its constituency (every eight years).

B A GOOD SOLUTION: A G20 STRUCTURE OF THE BOARD

As we have seen, since the 2008 Summit, the G20 has been exerting increasing power over the IMF. In these years there have been situations where during the spring or Annual

IMF BOARD: REGIONAL DISTRIBUTION OF DIRECTORS (2010-2012) FIGURE 4.13

	Executive Directors			Voting power	
	Country leading the constituency	# of countries (country/chairs ratio)	% of directors	pre-2006	post-2010
Europe	8 [9] (a): Germany, [Spain], France, Italy, Nordics, Belgium, Netherlands, United Kingdom and Switzerland	50 (6)	33.3 [37.5]	35.68 [40.12]	32.22 [35.81]
EU	7 [8] (a): Germany, [Spain], France, Italy, Nordics, Belgium, Netherlands, United Kingdom	42 (5.7)	29.2 [33.3]	32.86 [37.3]	29.43 [33.02]
Euro zone	5 [6] (a): Germany, [Spain], France, Italy, Nordics, Belgium, Netherlands	33 (6.2)	20.8 [25]	24.58 [29.02]	22.13 [25.72]
America	5 [4] (a): Argentina, Brazil, Canada, USA, [Mexico/Venezuela]	35 (6.25)	20.8 [16.6]	29.17 [24.73]	29.75 [24.8]
Asia and Oceania	5: China, India, Thailand, Japan, South Korea/Australia	34 (6.8)	20.8	19.1	22.79
Middle East	3: Saudi Arabia, Iran, Egypt	21 (7)	12.5	8.77	7.33
Sub-Saharan Africa	2: English speaking Africa, Francophone Africa	43 (21.5)	8.3	4.44	5.12
Euro-Asia	1: Russia	1	4.1	2.69	2.59

SOURCE: IMF.

a In brackets the situation when Mexico, Spain or Venezuela join their shared constituency.

Fund meetings, the G20 ministers have met twice, once in the G20 and other as members of the IMFC. The non G20 members of the IMFC have been complaining about the G20 preponderance and are requesting regaining a higher role for the Committee. In practice it makes little sense a Board that endorses the decisions in the G20 (as the governance reform of October 2010). Therefore, the most efficient would be a composition of the Board and the IMFC parallel to the G20. Some authoritative voices have already proposed to advance in this line (Camdessus et al. 2011).

Other authors have recovered the proposed unification of the chairs of the EU, or at least the euro area, in a single chair (see Bini Smaghi, 2004). This is the view taken by the Commission and the European Central Bank, however, it does not have the backing of large EU countries. Further, it is not clear either whether a single European chair would keep the sum of the individual countries voting power. For example, it has been raised in the past the option of eliminating intra community trade in the openness and variability variables of the quota formula in case of a single EU (or euro area) constituency.

Among these proposals, the approximation of the Board to the G20 seems like a good long term solution. The IMF remains an institution representing countries, and the management of the global financial crisis has demonstrated the relevance of the nation state in the international economic order (Moreno, 2010). Albeit with a mixed (and probably declining) coordination success since 2008 (see Chapter 1), the G20 is configured as the central body for economic strategic direction and coordination. In a context of economic globalization, there is a need for international decision making bodies, and while the G20 is still far from it, it does make sense to try to approximate the composition of the different bodies (i.e. IMFC and G20) at least to avoid costly duplication and inter body coordination procedures.

Figure 4.14 shows the differences between the composition of the Board of the IMF and the G20 linking the nineteen countries within the G20 and those who have an Executive Director (ED) – permanent or rotating – in the IMF Board.

COMPARED COMPOSITION OF THE G20 AND THE IMF´S EXECUTIVE BOARD

FIGURE 4.14

Region (a)	IMF Executive Directors (ED)			
	Permanent ED		Rotating EDs	
	G20 country	Non G20 country	G20 country	Non G20 country
Europe [60-50] (Euro-Asia) [2-2]	France			Nordic constituency
	Germany			Netherlands/Belgium
	Italy			Switzerland/Poland
	UK		(Turkey)	Austria/ Eastern Europe
	(Russia)		Spain (invitee)/México	Venezuela
America [5-35]	Brazil		México/Spain (invitee)	Venezuela
	Canada		Argentina	Chile/ Peru/ Uruguay
	USA			
Asia and Oceania [6-34]	China		Indonesia	Thailand and Singapore
	India		South Korea/Australia	
	Japan			
Middle East [1-21]	Saudi Arabia			
		Egypt		
		Iran		
Sub Saharan Africa [1-43]			South Africa	Rotates with 20 countries
				22 countries rotate (francophone constituency)

SOURCE: Own elaboration based on IMF and G20 information.

a Number of G20 member countries – Number of IMF member countries, in the region.

In the relation between the G20 and the Board we may underlie the following aspects:

— 12 countries are represented in the G20 and have permanent director: Brazil, Canada, China, India, Japan, France, Germany, Italy, United Kingdom, Saudi Arabia and Russia.

— 8 countries are represented in the G20, but do not have a permanent director. All of them have a rotating director – Argentina, Australia, South Korea, Indonesia, Mexico, Spain and South Africa, and Turkey (in this case only after 2012, previously, Turkey never rotated in the ED position). In some cases, the rotation is established with other G20 members, such is the case of South Korea with Australia, and Mexico with Spain (Spain has the status of permanent guest at the G20).

— 5 groups of advanced and emerging countries, have director at the Board but they are not part of the G20. Of these, three have a rotating ED (Belgium/Netherlands, Switzerland/Poland, and Nordic constituencies) and two a permanent Director (Egypt and Iran).[32]

— The two sub-Saharan Africa constituencies group the largest number of countries of the Board. Other than South Africa, they are not part of the G20.

— In the G20 there is no representation of developing countries and there is a low representation of African and Middle Eastern countries.

---

32 Egypt and Iran have been maintaining permanent Executive Director for the past 20 years, although the rotation agreement in their chairs is likely to vary.

Considering these aspects, and based on the European commitment to give up two seats of advanced countries on the Board, a rapprochement could be reached between Board and G20 from the following changes to the Board: (i) the transfer of the least the equivalent of a chair to be led by emerging European countries (Turkey being a natural candidate to be benefited because its membership in the G20 and its traditional under-representation in the IMF); (ii) giving the equivalent to a second chair to be led by developing countries in sub-Saharan Africa, and (iii) adapting the compositions and rotations of the chairs, especially the European ones, to better reflect the new quota structure following the 2010 reform and the structure of the G20.

In parallel, the G20 should correct the under-representation of developing countries incorporating at least two additional countries in sub-Saharan Africa. This type of mechanism has already been introduced with the ad hoc invitations to developing countries to the summits. Finally, approaching the Board and G20 structures would dilute the debate on raising the IMFC range to Council whenever IMFC and G20 would have equivalent and no competitive structures in the strategic direction of the IMF. [33]

33 It should be noted that the 19 countries belonging to the G20 have a voting power of 64.8%, which would reach 83.6% when taking into account the aggregate voting power of their constituencies (85% when Indonesia holds the director position in its constituency). Therefore, the G20 would have, de facto, the political pulse and voting power necessary to make the changes in the Board.

5 A more flexible lending policy

> Futurology is more science fiction than it is economic science …
> But my time was well spent if it persuades you to adjure the big picture of prophecy, and instead calculate the probabilistic odds … *(Samuelson, 1994, p. 195-197)*

On March 24, 2009, the IMF initiated a major review of its lending policy. As in previous crisis episodes, the Fund responded quickly to the global financial crisis by easing its lending conditions. The changes introduced have articulated a lending policy around the two basic functions of the Fund: crisis prevention and crisis resolution. Traditionally, crisis prevention was a task that corresponded to the surveillance function of the IMF;[1] from 2009, the Fund introduces a new insurance line directly aimed at preventing crisis.

In the previous chapters, we have analyzed the main determinants of IMF lending policy designed from 2009. This new policy, as we saw in Chapter 1, is part of the international response to the global financial crisis. Its specific elements are inheritors of the historical changes in the lending policy and the new policy is accompanied by the necessary increase in Fund resources, which constitute its budget constraint (aspects discussed in Chapter 2). Moreover, a central element of the new lending policy is the development of the insurance function that is part of the GFSN discussed in Chapter 3. Finally, the reform is made possible by new political determinants in the IMF, both of formal and informal nature (developed in Chapter 4).

These antecedents place in the year 2009 a turning point in the IMF lending policy. We develop these aspects in sections 5.1 and 5.2, where the main characteristics of the crisis resolution and insurance facilities are analyzed, and in 5.3, the challenges facing the lending policy. Figure 5.1 summarizes the main design elements of the lines under the General Resources Account (GRA).

5.1 More realistic crisis resolution programs

In late 2008, with frozen international financial markets, many of the IMF member countries were venturing into of balance of payments crisis. The facilities at the Fund's disposal were not sufficient to address a global crisis. Large volumes of short-term resources were needed and adjustment programs that would allow to implement rescue policies and to boost demand, and there was also a need to boost confidence in markets, which did not distinguish among countries.

The Fund responded by adapting its crisis resolution facilities in three ways: (A) a new approach – more realistic – to conditionality, (B) greater and more flexible access to Fund resources, and (C) simplification and rationalization of the lending facilities.

A MORE REALISTIC CONDITIONALITY

The conditionality is refocused towards a new approach more based on an overall assessment of the program's progress, rather than in the strict compliance with specific conditions. The country, the staff, and the Board gain flexibility when assessing the program effectiveness and viability without being corseted by checking whether or not the country meets a list of preset conditions.

The new approach mainly affects structural performance criteria, which are removed from all programs and replaced by structural benchmarks – which are not of mandatory

---

1 The exception was the never used CCL, as we saw in Chapter 2. Also, the CCFF introduced in 1988 a window for exogenous contingencies removed in 2000, although of limited time scope, and for a very specific casuistic of current account exogenous risks.

IMF FACILITIES UNDER THE GENERAL RESOURCES ACCOUNT (2011) (GRA) (a) FIGURE 5.1

	Stand-by Arrangement (SBA, 1952) High Access Precautionary Arrangement (HAPA, 2009)	Extended Fund Facility (EFF, 1974)	Flexible Credit Line (FCL, 2009)	Precautionary and Liquidity Line (PLL, 2011)
Contingency	Balance of payments problems in the short term. It may have a precautionary use and is known as HAPA (the country assumes the IMF program but choose not to receive the amounts of the loan).	Balance of payments structural problems. It may also have the possibility of precautionary use (although it is not used).	Prevention of exogenous shocks in countries with strong economic fundamentals.	Moderate balance of payments vulnerabilities. Following the reform of November 2011, in case of short-term liquidity problem in the balance of payments.
Access Limits	— Normal range: annual 200% quota; total 600%. HAPA allows high access. — Exceptional access: greater than 600% under four conditions: (i) exceptional (real or potential) balance of payments pressures; (ii) high probability of medium-term sustainability of the public debt; (iii) prospects of regaining access to capital markets, (iv) high expectation of success of the program.		Without predetermined access limit. (The 2011 FCL granted to Mexico and Poland provided access in 1,300 and 1,100% quota respectively).	Precautionary use: 500% annually up to 1,000% the second year. Use in short term liquidity problems: 250% up to 500% maximum.
Conditionality	— Ex post conditionality: disbursements subject to compliance of quantitative conditions (performance criteria on issues such as international reserves and the deficit or public debt levels); and structural benchmarks that are critical to the program, and assessed under an overall assessment of the progress in the implementation of the program (the new framework of the SBA eliminates structural performance criteria). The EFF has a higher weight on structural benchmarks.		Qualification criteria (or ex-ante conditionality): grouped into five areas: (i) external position: must be sustainable with a capital account dominated by private flows, a history of access to international markets on favorable terms and a relatively comfortable level of reserves; (ii) fiscal policy: sound public finances, including a sustainable public debt; (iii) monetary policy: inflation low and stable and solid exchange rate; (iv) financial system: absence of bank solvency problems that pose a threat to the stability of the system and effective supervision of the financial sector, and (v) integrity, quality and transparency of financial information. The FCL requires very strong fundamentals in the five areas, and the PLL allows moderate situation in two areas; plus, the Board must have assessed the situation in the country in the last Article IV as "very positive" (FCL) or "positive" (PLL). The PLL also incorporates a biannual review program with ex post conditionality focused on the vulnerabilities identified in the qualification process.	
Interest Rate	The basic rate is fixed from the SDR interest rate (approx. 0.3% at 31/12/2010) plus 100 basis points (bp), and a service charge of 50 basis points for each amount disposed. On top of this rate there is a surcharge of 200 bp for quantities exceeding 300% of quota, and 100 bp in the case this access last longer than three years. If resources are not used, an upfront fee or annual commitment (refundable if the country uses resources) is established based on the amount of loan: 15 bp for amounts up to 200% of quota, 30 bp for amounts from 200 to 1,000%, and 60 bp for higher amounts.			
Duration [Repayment Period]	Usually 12-24 months and a maximum of 36 months. Renewable. [8 quarterly payments between 3 ¼ and 5th year from each disbursement].	Three years. Renewable. [12 semiannual payments between 4 ½ and 10 years from each disbursement].	From 1 to 2 years (in the case of the PLL it can be also half year). Renewable: in the renewal it is reviewed if the country continues to meet the qualification criteria. [8 quarterly payments between 3 ¼ and 5th year since each disbursement, 1 ¼ -2 years for the 6-months PLL].	

SOURCE: IMF.

a Together with these facilities, the GRA also finances the Rapid Financing Instrument (RFI), which provides urgent resources without the need for a full-fledged program in emergency situations such as natural disasters, post-conflict situations or commodity price shocks. Its access is limited annually to 50% of quota and to 100% in total. It has the same financing conditions as the rest of the facilities and the same repayment period as the SBA.

compliance and are evaluated as a whole in the context of the overall review of the program. Therefore, the monitoring of structural policies no longer requires that the country must meet specific reform conditions to continue receiving disbursements. The conditionality does retain the quantitative performance criteria, although some countries had also requested its elimination. Figure 5.2 shows the new structure of conditionality.

Beyond the need to respond to the global financial crisis, the reform of the conditionality cannot be understood without considering the consolidation in the Board of two

Prior actions are the measures a country adopts before the loan is approved. These are necessary conditions for the implementation of the program (e.g. the removal of price controls or formal approval of the government budget in accordance with the fiscal framework of the program).	
Quantitative performance criteria are specific conditions usually regarding macroeconomic variables that have to be fulfilled for successive disbursements to take place (e.g. a minimum level of net international reserves, a maximum level of Central Bank net domestic assets, or a maximum level of government borrowing). These criteria may be supplemented with indicative targets, usually set for the end of the program period and are reconverted into performance criteria, as the country economic situation becomes more solid.	
Structural benchmarks: measures that are considered central to achieving the objectives of the program and will depend on each case. It may include measures such as improvements in the financial sector or in public financial management, or construction of social safety nets. They do not condition the support from the Fund.	
Program reviews: regular reviews by the Board to analyze the progress of the program and possible changes in light of new economic developments.	

SOURCE: IMF (2010l).

principles that were gaining weight in the late 1990s: the ownership of the program by the country, and the parsimony (criticality) of the conditions.

In 2002, following an extensive consultation process, the IMF updated its guidelines on conditionality, which dated back to 1979.[2] This revision recognized a set of principles that are considered central to the success of a program, including: the principle of ownership of the program by the country; the criticality and parsimony in implementing the conditions of the program; the adjustment of the program to the country circumstances; the clarity and specificity of the conditions; and the effective coordination with other multilateral institutions (IMF, 2002b).

The principle of ownership of the program results in a shift in the burden of program design from the staff to the country authorities. The program can only be effective to the extent that the authorities assume politically its execution and are able to transmit its necessity to the public opinion. The IMF must take an advisory role, but must not be perceived as imposing the program on the country – although as noted James Vreeland (2004), in many cases, the authorities would prefer to keep the IMF as the scapegoat for the reforms.

In practical terms, the development of this principle largely depends on the capacity of the mission chief and the authorities to negotiate a sustainable and politically viable program.[3] The institutional impregnation of the ownership criteria is reflected in higher negotiating leverage by the country authorities. It is also reflected in the deliberations of the Board, which since the 2000s, has recurrently debated on the level of ownership in the programs.

In relation to the principle of parsimony, the 2002 Guidelines state that the conditions of the program should be of central importance to achieve the program objectives, and must relate to macroeconomic and structural measures within the scope of IMF competences, including: macroeconomic stabilization, monetary fiscal and exchange rate policies, and domestic and international financial markets and institutions and structural measures needed to implement these policies. It also required a greater justification for conditions outside these areas (IMF, 2002b).

In 2007, the IEO conducted an analysis of IMF structural conditionality that was particularly devastating and had a great institutional impact (IEO, 2008). After the analysis of 216 programs in 94 countries between 1995 and 2004 (with a more detailed analysis of 43 of them and 13 case studies), it was concluded that structural conditionality was ineffec-

2 For a discussion of the implications of the new 2002 guidelines see Serra (2003).
3 The political ability of the mission chief should not be taken for granted. It is important that they develop good communication skills and a good understanding of the country's idiosyncrasy.

tive and needed major reform. The average performance of the structural conditions was just over 50% (compared with 85% compliance with macroeconomic conditionality), and the efforts to reduce it, initiated since 2000, had not fructified (the programs were still maintaining an average of 17 conditions per program).[4] Moreover, in many cases, the conditions were neither clearly linked nor necessary to ensure the program's success. The report concluded with the need for a change in institutional incentives of the Fund so that the programs were better suited to the technical and political realities of the countries, and proposed to set fewer conditions and more focused on their criticality to the program and the IMF expertise (it was proposed a limit up to 4 or 5 conditions as a guide to force a change in attitude of staff in negotiating programs).

In 2008 the Fund has took another step by adopting a plan to strengthen the implementation of the Guidelines. The plan called for better justification of the critical nature of the conditions and explicit linkages between goals, strategies and conditionality (IMF, 2008b). The 2009 reform represents a definite step by directly eliminating structural performance criteria. Later, in September 2012 the Guidelines have been reviewed taking into account the new type of program design after 2009, and the Fund has concluded that they were better applied and that remain broadly appropriate, placing again the emphasis on focused conditionality and ownership.

B LARGER AND MORE FLEXIBLE ACCESS TO FUND RESOURCES

The policy of the IMF access limits had remained unchanged since 1994. The annual limit was set at 100% of the quota and cumulatively for the program at 300%. In 2008 it was clear that these limits did not allow sufficient resources to address the needs of a balance of payments crisis, much less in situations of capital account crisis, where countries should dispose of a high volume of short-term resources to appease mistrust in the markets.

The rapid process of economic globalization since the 1990s had increased the foreign exposure of the countries and therefore the potential needs for resources. The overall quota increase in 1998 (45%) had temporarily managed to correct the problem, and the ad hoc quota increases for 2006 and 2008 (11.5%) only marginally improved the access for those countries that received a quota increase. The IMF estimated that, to recover the relative level of access with respect to global GDP in 1998, the limits should be at [155% per year, and 464% cumulative] levels. The limits should even be higher when compared with the relative levels of 1998 with respect to other variables such as: world trade or international capital flows: [221%, 663%] and [215%, 645%] respectively (IMF, 2008c).

In this context, in order to instill confidence on the availability of resources, the IMF modified its policy on access, expanding the limits and rationalizing the disbursement and cost structures. The following major changes were introduced:

- (i) Duplication of the normal access limits. Finally, closer to the criterion regarding capital flows and international trade, the IMF chooses doubling the access limits, by placing them at 200% of quota for annual disbursements, and at 600% as the cumulative program limit.[5]
- (ii) Review of the exceptional access policy. The exceptional access framework is extended, and now becomes active from the new ordinary limits. The

4 The Board may approve the continuation of the program by granting waivers (exemptions) to the performance criteria. A waiver must be based on the good performance of the remainder of criteria and that the authorities are taking steps to address compliance. In practice, many programs accumulated several waivers that were repeated in successive revisions of the program, under guarantees on future compliance limited to mere declarations of intent by the authorities.

5 On the other hand, it also doubles the outstanding credit threshold – up to 200% – that is required for the activation of the post-program monitoring (carried out once a program ends).

framework becomes applicable to any balance of payments difficulties (not just capital account), and incorporates a precautionary element: it may be activated in case of potential balance of payments needs (not only real). The criteria are reformulated as follows (IMF, 2009e):

(a) The member is experiencing or has the potential to experience exceptional balance of payments pressures on the current account or the capital account, resulting in a need for Fund financing that cannot be met within the normal limits.

(b) A rigorous and systematic analysis indicates that there is a high probability that the member's public debt is sustainable in the medium term. However, in instances where there are significant uncertainties that make it difficult to state categorically that there is a high probability that the debt is sustainable over this period, exceptional access would be justified if there is a high risk of international systemic spillovers.[6] Debt sustainability for these purposes will be evaluated on a forward-looking basis and may take into account, inter alia, the intended restructuring of debt to restore sustainability. This criterion applies only to public (domestic and external) debt. However, the analysis of such public debt sustainability will incorporate any potential contingent liabilities of the government, including those potentially arising from private external indebtedness.

(c) The member has prospects of gaining or regaining access to private capital markets within the timeframe when Fund resources are outstanding.

(d) The policy program of the member provides a reasonably strong prospect of success, including not only the member's adjustment plans but also its institutional and political capacity to deliver that adjustment.

(iii) Phasing in purchases and repurchases. The phasing in and frequency of disbursements is adjusted to the nature of the balance of payments problem, and the evolution of the political and economic situation in the country. Even the possibility of a single disbursement at the approval of the agreement is opened, including elevated access levels with a preventive character, the so called HAPA.[7] Furthermore, the rules on "expected repurchases" governing program repayments are repealed.[8]

(iv) New interest rates and maturities. A new tiered rate system is introduced, with higher surcharges depending on the amounts drawn and the time elapsed. There is a fixed surcharge of 200 basis points (bp) to credit volumes above 300% of quota and additional 100 bp when live credit exceeds this percentage for more than three years. The fee for freezing funds (in the case of precautionary loans) also increases with the volume of guaranteed resources (15 bp for an access level up to 200% of quota, 30 basis points up to 1,000%, and 60 bp above this amount).

C SIMPLIFICATION AND RATIONALIZATION OF THE FACILITIES TOOLKIT

In parallel to the easing of conditionality and access, the IMF made an adjustment in the financial facilities toolkit of the General Resources Account (GRA), leaving only two facilities: the Stand-By Arrangements (SBAs) and the Extended Fund Facility (EFF). The EFF is

6 This second sentence is added in 2011, due to the Greek program.

7 As we shall see in the next section, the HAPA is established as the alternative insurance offered by the Fund to countries that do not qualify for access to FCL or PCL.

8 The Fund had a complex system, which provided two dates for the repayment of loans (so-called repurchases): expected and obligation schedule of repurchases.

kept for cases in which the balance of payments crisis is structural in nature and requires further adjustment period (Figure 5.1). On the other hand, the concessional financing facilities for low-income countries are also reorganized (see Figure 5.3).

The goal is to maintain a single flexible framework that can be adapted to any balance of payments needs and to avoid the confusion and arbitration that may occur between facilities with different features, and designed for different types of balance of payments crises. In 2009 the following services – on the other hand in disuse – were eliminated: the Supplemental Reserve Facility (SRF, created in 1997), the Compensatory Financing Facility (CFF, 1963), and the newly created Short-term Liquidity Facility (SLF, 2008), which is replaced by the FCL. The cancellation of these facilities continues the simplification process that had already begun in 2000 and 2005, as we saw in Chapter 2.[9]

5.2 New insurance function without conditionality

At the turning point of the crisis with the collapse of Lehman on September 15, 2008, and the subsequent freezing of the capital markets, the IMF did not have any insurance instrument that would allow countries a fast access to great volume resources in case of contagion. The Fund reacted very quickly with the creation of the Short-term Liquidity Facility (SLF) on October 29. It was a service that offered fast and high finance to countries with sound economic policies, facing temporary liquidity problems in global capital markets. The SLF was the IMF's contribution alongside with other international initiatives, such as the lines of credit opened by central banks in domestic markets or bilateral swaps between central banks.

Soon, however, it will be revealed that the SLF was insufficient – low access limits, short term and without possibility of precautionary use –. Further, it was overcome by the reforms of March 24, 2009, with the introduction of a new facility, the Flexible Credit Line (FCL), the expansion of the access limits of the SBA,[10] and the possibility that the SBA agreements were used as precautionary instruments and with high access, the so-called HAPA.

The FCL is constituted as a precautionary facility to ease the risk of illiquidity, without conditionality, and formally with unlimited access – although initially it was established an implicit limit of 1,000% of the quota – for countries with good economic fundamentals and a history of implementing sound economic policies. Countries may access it if they meet pre qualification criteria.[11] The HAPAs was left for countries with worse fundamentals that could sign a precautionary high-access program (without a specified limit), with the possibility of a single initial disbursement in case of liquidity problems.

In practice, because of the design of the qualification criteria, but also by an implicit understanding, an asymmetry in the Funds facilities had been introduced so that: the advanced and emerging countries with large and strong economies, had access to precautionary funding without conditionality (FCL), while for other countries, a program was required (HAPA). In this context, the G20 pushed for further reform of insurance facilities to give a greater coverage to all member countries.

Thus, the initial framework was reformed in August 2010 by creating the Precautionary Credit Line (PCL), to insure against risks of liquidity to countries with moderate balance of payments vulnerabilities. The PCL is halfway between the FCL and the HAPA. As the FCL maintains qualification criteria, but remains, like the HAPA, with ex post conditionality, although smaller and focused on the vulnerabilities of balance of payments (therefore less strict in principle). The PCL limits access to an initial 500% during the first

9 For a detailed analysis of the simplification of the IMF financial facilities see Casas and Serra (2008).

10 Extending the ordinary limit of 600% SBA far exceeded the limit of the SLF, which offered only up to 500% of quota, with a maturity of three months and renewable up to twice a year.

11 This will save one of the main drawbacks of the former CCL, which required a new authorization from the Board to access resources once approved (see Chapter 2).

REFORM OF FACILITIES FOR LOW-INCOME COUNTRIES

FIGURE 5.3

On July 23, 2009, the IMF Board approved the reform of financing instruments for low-income countries. The reform will follow the same guidelines of the March 24 reform for the facilities financed with the GRA: easing of conditionality, expanding access limit, simplification of facilities and establishment of a line of insurance. It also increases the concessionality component.

Simplification of concessional financing facilities. Existing facilities are replaced by three new credit lines (see table below).

Flexibilization of conditionality. Structural performance criteria are eliminated and reinforced the emphasis on growth and poverty reduction. Programs should explain how these objectives are to be achieved and shall include, as far as possible, those that are specific to protect priority social expenditures. In the case of the RCF (shocks facility), it eliminates the requirement of having a PRSP, and conditionality should focus on correcting the shock in question with less emphasis on structural adjustment.

Greater concessionality. The ECF and SCF provide for a variable interest rate indexed to the SDRs rate, which ensures greater concessionality that the prior scheme of fixed interest rates (the PRGF and ESF rates were at 0.5%). Temporarily until January 2012, and as attention to the impact of the global financial crisis on low-income countries, it is set up a zero rate interest to the payments for the RCF (and thereafter 0.25). Repayment periods are held in 10 years, with a grace period of 5 years and a half, except SCF line, whose term was cut to eight years, with a grace period of four.

Facility	Characteristics	Access
Extended Credit Facility, ECF (2009)	Replaces the PRGF, configured as the main instrument of concessional financing of low-income countries. Provides financial medium term support to low-income countries with balance of payments problems.	Annual: 50% quota. Total: 150% quota. (a) Extended in exceptional circumstances. Bi-annual evaluation (or quarterly in periods of high volatility).
Standby Credit Facility, SCF (2009)	It becomes a specific SBA for low-income countries with the advantage that it includes a grant element (smaller than the ECF). It differs from the ECF because it is short-term oriented to correct balance of payments imbalances and not medium term problems related to development and poverty reduction. As SBA has the possibility to be used as precautionary instrument.	
Rapid Credit Facility (2009)	Line designed for emergency and transitory funding needs or in response to shocks, replacing the various facilities that the IMF had to that effect. Therefore, it combines into a single and flexible facility, the assistance to shocks without distinguishing the origin. This facility eliminates the requirement of a PRSP. Replaces the ESF. Provides quick financial support to low-income countries with urgent balance of payments needs. Direct disbursements without conditionality or evaluations.	Annual: 12.5% quota. Total: 50% quota. (a) In case of an answer to shocks, expandable to Annual: 25% quota. Total: 62,5% quota.

SOURCE: IMF.
NOTE: The IMF maintains an additional program with no financial support, the Policy Support Instrument (PSI) that acts as a seal of approval on the country´s policies.

a The inicial reference access limits approved in 2009 at 100 and 300 percent of cuota (25% and 75% for the RCI), were reduced in 2013 in line with the relative reduction in resources of the PRGT subsidy account.

year, plus an additional 500% after one year and subject to good progress in the program. In parallel, the FCL conditions were also improved in two ways: extending the concession period from one to two years (with review of eligibility criteria in twelve months), and a deletion of the implicit access limit of 1,000% of quota.

Again at the initiative of the G20, on November 21, 2011, the framework is newly reformed by creating a window of liquidity in the PCL, which is now called the Precautionary and Liquidity Line (PLL). The PLL maintains its precautionary function and opens the option of providing short-term liquidity in a modality of six months and limiting access to 250% of quota, which could reach up to 500% in a situation of extreme systemic crisis.

The PLL has been linked to the need of a facility for the debt crisis in Europe. However, its introduction had more to do with the will of the G20 and IMF to provide short-term liquidity of the type offered by central banks with bilateral swaps. The Fund had been trying it since 2010 with the rejected proposal to create multi-country swaps,[12] within a broader framework that also intended to coordinate the concerted actions of central banks. In 2011, the French presidency of the G20 reopens this debate. The decision to open the liquidity window of the PLL comes as an easier solution than activating a new facility that could be identified directly as a foreign currency liquidity swap, although it comes very close to it in practice (with the exception of fixing explicit qualification criteria).

The introduction of the FCL and the PLL has two implications which represent a turning point in the lending policy of the Fund: (i) the introduction of eligibility criteria or ex ante conditionality, and (ii) the reinterpretation of the balance of payments (BoP) need test.

(i) The introduction of eligibility criteria or ex ante conditionality.

The FCL eliminates the traditional ex post conditionality structured around a program that dominated all the facilities of the IMF since its inception in the 1950s, and replaces it by ex ante eligibility criteria as a condition to access the program. In practice, the same applies to the PLL for the first tranche of 500% of quota (for the second tranche of 500%, it will have to demonstrate progress with the program). Access in both cases is established from a series of preset eligibility criteria, focused on five areas: external sector, fiscal and monetary policies, financial system and quality of economic information (see Figure 5.1). In the case of the FCL the country must show good performance on all the criteria, and at least on three of them in the case of PLL.

(ii) Extending the test of balance of payments (BoP) need.

Article I of the IMF Articles of Agreement provides that one of the objectives of the IMF, is to make resources available to the members "…temporarily available to them under adequate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity". Equally, Article V Section 3 (b) (ii) "the member represents that it has a need to make the purchase because of its balance of payments or its reserve position or developments in its reserves" (IMF, 1993). Therefore, the doctrine of the loans is based on the existence of a need or declared balance of payments imbalance, and in the conditionality to ensure the country's capacity to repay the loan.

Over time, the concept of balance of payments need has evolved from shortages of reserves or current account deficit, to the assessment of the factors that determine the balance of payments crisis, and the external debt servicing capacity. So normally the staff evaluates aspects such as public or private debt, prospects for direct investment, portfolio investment developments (domestic and foreign), foreign exchange framework, risk of capital flight, financial system stability, or level of reserves.

The insurance facilities introduce a new variant, enabling resources as a precautionary measure for a country, which expressly is recognized as being in a good balance of payments situation – before an imbalance occurs –.[13] Legally, this change is based on the criterion that the balance of payments need is circumscribed to the "access" to the resources, and not to the signing of the agreement. Thus a precautionary agreement can be signed, as long as access to resources will only occur if the country has a liquidity problem, that is, when the necessity arises (IMF, 2009a).

Beyond the legal aspect, precautionary arrangements are based on the high cost of capital account crisis, both for the country and for the world, via contagion. The best

12 They were unilateral offers of parallel swap lines to the affected countries with risk of illiquidity for a period of 3 to 6 months (see Chapter 3).

13 The extinct and never used CCL tried to offer a facility in those terms: allocation of resources without a context of crisis, and for countries with strong fundamentals (see Chapter 2).

FCL AND PCL GRANTED BY THE IMF (2009 TO 1 FEBRUARY 2011) FIGURE 5.4

Line	Country	Approval Date (duration)	Loan Amount			Short term debt (std) (b)	Reserves (a) (c)
			% quota	q (a)	q/ std		
FCL	Colombia (d)	7-May-10 (1 year)	300%	3,500	15.42%	22,700	27,500
	Mexico (e)	10-Jan-11 (2 years)	1,304%	72,100	60.90%	118,400	123,900
	Poland (e)	21-Jan-11 (2 years)	1,135%	29,200	16.22%	180,000	97,100
PCL	Macedonia	19-Jan-11 (2 years)	600%	630	12.60%	5,000	2,100

SOURCE: IMF.

a US $ millions.
b Short term public and private debt with maturity in 2011 and 2012 of foreign and domestic creditors.
c Level of reserves at the moment of granting the credit.
d Colombia subscribed a first FCL in 2009 for 900% of quota and a third one in May 2011 for 500%.
e Mexico and Poland, renewed the previous the FCL subscribed in 2009 for 870% and 811% of the quota, respectively. The three countries have again renewed FCLs in 2012/2013.

way to address them is the containment before they occur, via signaling and giving confidence to the markets, so that the IMF plays a catalytic role to maintain the country's access to capital markets, thereby avoiding the appearance of a BoP need. This is the kind of argument built at the end of 1990s after the Asian crisis (see Chapter 1).

In short, with the two new precautionary facilities, the IMF provides insurance without conditionality against an exogenous liquidity shock. And it does so in a double way: by providing resources when needed, and with the implicit guarantee to the markets that the country is in good health and has the explicit support of the Fund. As an example, the first FCL and PCL loans granted, have allowed extensive coverage of about 15% of the potential balance of payments risks, 60% in the case of Mexico (using as proxy the short-term debt, see Figure 5.4).

The FCL and PLL are the type of insurance facilities that had traditionally been demanded by emerging economies. The new governance structure of the IMF, discussed in Chapter 4, with a greater weight of emerging economies, allowed the development of this insurance function. In fact, the creation of the PCL and the relaxation of the FCL in 2010 are largely driven by South Korea, which placed the GFSN reform as a priority of its G20 presidency that year. As seen in Chapter 3, the insurance function of the IMF is part of the GFSN, with swaps, bilateral agreements, regional funds, and accumulation of reserves (self-insurance).

In November 2011, the Fund anticipates the revision of the FCL and the PLL, which was scheduled for 2013,[14] and brings back to 2013-14 the next revision, or earlier if loans under these facilities exceed SDR 150,000 million (instead of the normal five years for reviews). This cautious revision policy responds to the lack of consensus in the Board on the insurance function of the Fund. The FCL has been subject of significant discussion and there has been reluctance to its approval, especially by some advanced economies of continental Europe concerned with the high moral hazard posed by a lending window without conditionality (the next section assesses the continuity of the Fund's insurance function). Figure 5.5 reviews the use of the new insurance and crisis resolution facilities since they were activated in 2009 (see also Figure 2.7 in Chapter 2).

14 The FCL is born with a review clause in August 2013, or sooner if the loans exceed 100,000 million SDR (IMF, 2010m). The review is advanced to November 2011 to coincide with the conversion of the PCL into the PLL and taking into account that loans under these facilities had already reached 70,000 million SDRs. It is important to note that unlike the CCL sunset clause, now the burden of proof in the reviews is to establish that these facilities are unnecessary (for the CCL, its utility had to be demonstrated and it ended up expiring without renewal because it was never used).

PROGRAMS UNDER THE NEW LENDING POLICY (2009-2011)

FIGURE 5.5

LOANS GRANTED UNDER GRA (FALL 2008 TO 30 NOVEMBER 2011)

Beneficiary country	Type of agreement (a)	US$ Mill. (b)	% quota	% GDP	Length (months)	Date of approval or last renewal
Europe (c)		**230,122.2**	**892.3%**	**9.9%**	**27.7**	
Greece	SBA	41,641.3	2,398.6%	13.6%	36.5	9-May-2010
Portugal	EFF	37,402.2	2,305.0%	16.3%	36.5	20-May-2011
Ireland	EFF	30,665.6	1,547.4%	14.8%	36.5	16-Dec-2010
Poland (d)	FCL	30,193.3	1,135.4%	6.4%	24.3	21-Jan-2011
Romania (e)	SBA	18,026.8	1,111.0%	11.2%	23.2	4-May-2009
Ukraine (e)	SBA	17,328.9	801.7%	12.6%	24.3	5-Nov-2008
Hungary	SBA	16,600.3	1,015.2%	12.7%	23.3	6-Nov-2008
Ukraine (e)	SBA	15,753.6	728.9%	11.4%	29.4	28-Jul-2010
Romania (e)	SBA	4,868.8	300.1%	3.0%	24.3	31-Mar-2011
Serbia (e)	SBA	4,126.1	559.6%	10.9%	27.3	16-Jan-2009
Belarus	SBA	3,575.3	588.0%	6.5%	15.1	12-Jan-2009
Latvia	SBA	2,397.1	1,071.6%	10.0%	24.3	23-Dec-2008
Iceland	SBA	2,205.5	1,186.4%	17.5%	33.5	29-Nov-2008
Bosnia&Herz.	SBA	1,598.4	600.4%	12.9%	36.3	8-Jul-2009
Serbia (e)	SBA	1,473.6	199.9%	3.9%	18.2	29-Sep-2011
Georgia	SBA	1,177.0	498.1%	10.1%	33.4	15-Sep-2008
Macedonia	PCL	651.3	599.1%	7.1%	24.3	19-Jan-2011
Moldova	EFF	291.1	150.2%	5.0%	36.5	29-Jan-2010
Kosovo	SBA	146.0	157.0%	2.6%	18.3	21-Jul-2010
LatinAmerica (c)		**84,737.2**	**514.5%**	**6.2%**	**30.7**	
Mexico (d)	FCL	74,501.9	1,304.2%	7.2%	24.3	10-Jan-2011
Colombia (d)	FCL	6,096.6	500.0%	2.1%	24.3	6-May-2011
Dominican Rep.	SBA	1,724.2	499.8%	3.3%	28.3	9-Nov-2009
Jamaica	SBA	1,292.6	299.5%	9.7%	27.3	4-Feb-2010
El Salvador	SBA	809.6	300.5%	3.8%	50.3	26-Jan-2009
Antig.&Barbuda	SBA	127.6	578.6%	10.2%	36.5	7-Jun-2010
Honduras	SBA	102.0	49.8%	0.7%	18.2	1-Oct-2010
St.Kitts & Nevis	SBA	82.7	583.4%	12.2%	36.5	27-Jul-2011
Asia (c)		**19,118.2**	**402.5%**	**5.0%**	**30.4**	
Pakistan	SBA	11,399.1	699.8%	6.4%	34.7	24-Nov-2008
Iraq	SBA	3,744.3	200.1%	4.6%	24.3	24-Feb-2010
Sri Lanka	SBA	2,605.0	400.4%	5.3%	34.5	24-Jul-2009
Armenian (e)	SBA	840.6	580.0%	9.0%	28.4	6-Mar-2009
Mongolia	SBA	241.5	300.6%	3.9%	18.3	1-Apr-2009
Armenian (e)	EFF	210.2	145.0%	2.2%	36.5	28-Jun-2010
Maldives	SBA	77.5	492.0%	3.6%	36.5	4-Dec-2009
África (c)		1,412.0	213.4%	2.6%	29.4	
Angola	SBA	1,353.1	300.3%	1.6%	27.4	23-Nov-2009
Seychelles (e)	EFF	31.2	180.0%	3.3%	36.5	23-Dec-2009
Seychelles (e)	SBA	27.7	160.0%	3.0%	24.3	14-Nov-2008
TOTAL (c)		**335,389.6**	**662.9%**	**7.6%**	**29.0**	

SOURCE: Based on IMF data.

a Stand-by Agreement (SBA); Extended Fund Facility (EFF); Flexible Credit Line (FCL), Precautionary and Liquidity Line (PLL).
b Exchange Rate: 1$ =0.634776 SDR (2.11.2011).
c Regional and total figures are an average for all countries in the region.
d During the period, Colombia, Mexico and Poland renewed their FCL, the figure refers to the latest renewal.
e Countries that sign more than one program during the period; the figure sums the various programs signed under the GRA.

PROGRAMS UNDER THE NEW LENDING POLICY (2009-2011) (cont'd) **FIGURE 5.5**

The table above includes loans from the IMF between the fall of 2008 (after the deepening crisis with the collapse of Lehman Brothers) and the end of 2011, most of them approved under the new lending policy framework approved in March 2009. During these years the IMF has provided loans worth US$ 335,000 million. Several trends are observed:

Access. On average, the access in crisis resolution programs, SBA and EFF, is approximately at 607% (663% including the FCL and PLL precautionary arrangements), on the border of the new limits of ordinary lending policy, indicating the opportunity of the increase given the larger need for resources in the global financial crisis. In fact, in nine countries the limit has been exceeded and the exceptional access activated. In several European countries there is also the additional contribution of the EU, which in the case of Greece, Ireland and Portugal is on average 200% of additional resources. The program with Greece is a historical record in quota percentage (2,400%) previously held by the program with South Korea in 1997 totaling SDR 15,500 million, which represented 1,938% of the quota (but then South Korea was under-represented by quota in the IMF). Finally, on average, there are large initial disbursements (necessary in confidence-boosted crisis), with the first tranche of payment exceeding 25% of the total program, compared to 15% during the Asian crisis (IMF, 2011f)

Regional concentration. The programs with European countries account for about 68.6%. The percentage rises to 87% when considering only crisis resolution programs (excluding FCL and PLL). Here, there is a high weight of the programs with Greece, Ireland and Portugal, but also with the countries of Eastern Europe. By volume of resources, 8 of the top 10 programs are awarded to European countries. It should be noted that in the case of Africa, the majority of programs are granted under concessional financing through PRGT account, with an approximate value of US$ 18,000 million.

Type of facility. The FCL to Mexico for about US$ 74,500 million is the greatest facility granted, and the sum of the three FCL to Mexico, Poland and Colombia in the amount of US$ 110,800 million represents 33% of total loans.

5.3 The lending policy challenges

The new framework of the Fund lending policy has allowed giving response to the global financial crisis. Now, the question is its stability in the future. As we have seen, although the reform can be framed in the historical process of the Fund's lending policy, its central elements are articulated in a few months from October 2008 to March 2009, marked by the need for a rapid response to the crisis. In this sense, there is no general consensus on the Board, or the G20, on the opportunity to maintain a more flexible lending policy once a stable growth path has been recovered.

The future path of the lending policy will depend on historical, budgetary, economic, and political factors that we have analyzed in Chapters 1-4. This section analyzes the main challenges to the new IMF lending policy. To present them in a systematic way, notwithstanding the high interrelation between the different challenges and elements and the difficult compartmentalization, Figure 5.6 relates various elements of the lending policy and the key challenges, classified into three broad principles: sufficiency, sustainability, and predictability.

- *Sufficiency.* Member countries should have access to the resources needed to solve balance of payments problems. This would require a Fund with sufficient resources to meet demand and that the country quota reflects the country's weight in the global economy (and thus the volume of loan resources they may have access to).
- *Sustainability.* There must be safeguards to ensure that the policy can be maintained over time. This will require effective programs to resolve the country's crisis, and ensure the return of the loans to the Fund so that it may continue lending to other members. It also requires addressing moral hazard problems that may encourage unsustainable behavior of countries and investors in the expectation of an IMF bailout.

IMF LENDING POLICY CHALLENGES

FIGURE 5.6

Principles	Elements	Challenge
A. Sufficiency	a.1. Regular adjustment of resources: quotas and bilateral / NAB.	Ensure availability of resources to the Fund and that countries have access according to their relative weight in the world economy.
	a.2. Strengthening cooperation with Regional Financial Arrangements (RFAs).	Coordinate programs with RFAs, and profiting of comparative advantages.
	a.3. Creating liquidity by the IMF.	It is inserted into the broader discussion of International Monetary System and the IMF as a lender of last resort. It includes aspects such as leveraging by the IMF or the issuance of SDRs (the alternative less viable, with opposition by the main member countries).
B. Sustainability	b.1. Surveillance and coordination of economic policies.	Effective surveillance and coordination of macroeconomic policies as a precondition to granting programs, to avoid country moral hazard.
	b.2. Conditionality.	Maintain compliance standards and eligibility criteria in insurance facilities, to ensure repayment of the loan and avoid country moral hazard.
	b.3. Private sector involvement.	Avoiding investor moral hazard through private sector involvement in the resolution of the crisis.
	b.4. Exit strategies.	Limit moral hazard problems because continued access to the facilities (except in the case of insurance facilities).
C. Predictability	c.1. Transparency.	Transparency on the nature of the various facilities to avoid stigma.
	c.2. Institutional balance of power.	Ensure equal treatment between countries in access to various facilities and the future changes are made in the interests of its members.

SOURCE: Own elaboration.

— *Predictability.* Clear and transparent rules, so that countries and markets can interpret the different facilities and the signals transmitted avoiding problems of stigmatization. In addition, countries should have access to the various resources on an equal basis, that is, equal lending lines under similar economic circumstances.

A SUFFICIENCY

The IMF should have sufficient resources to support member countries with balance of payments imbalances and to fulfill its mandate in overseen global economic stability. Further, the new lending policy framework is an important challenge, because access limits of crisis resolution facilities are doubled, exceptional access criteria relaxed, and new insurance tools allow access without predetermined quota limit (such is the case of the FCL). Furthermore, the quota increase will also raise the volume of resources that each country can access. Moreover, to the extent that the insurance facilities are intended as a substitute to the accumulation of reserves, they should have a quasi-permanent character.

As we saw in Chapter 2, with the NAB and the doubling of quotas, approved in October 2010 (ratification scheduled for 2013/14), the volume of IMF quota and NAB resources stands at about US$ 1 trillion (see Figure 2.8), additionally, the G20 has committed throughout 2012/13 another US$ 460,000 millions in bilateral temporary contributions. Taking 2010 as reference, this volume allows placing the permanent resources of the IMF in 1998 levels, relative to world GDP, but far from the relative levels in terms of capital flows. Further, the expectation in the medium and long term should be further growth of the world economy and therefore *ceteris paribus* a decline in the Fund resources relative weight.

While the international community has taken a number of initiatives that should in theory reduce the need for Fund resources in the future, including, enhanced IMF surveillance – more focused on an early identification of crisis –; strengthened sovereign debt management (the IMF and the World bank are revisiting their guidelines on public debt management and revising their analysis on debt sustainability and debt limits); and efforts to improve the resilience of financial markets through strengthened financial and macrofinancial regulation, and improved banking resolution mechanisms (see Chapter 1); the increasing global economic interconnectedness calls for caution. Further, there is uncertainty on the outcome of the exit strategies of the unprecedented expansionary monetary policies, and over sovereign risk and the medium-term public debt reduction strategies in advanced economies.

Therefore, the Fund faces the challenge of adapting its resources to the growing and more interconnected world economy. In this respect, we may consider three main alternatives: (A.1) regular adjustment of resources; (A.2) strengthen cooperation with RFAs; (A.3) the creation of liquidity by the IMF.

A.1 Regular adjustment of resources: quotas, NAB and bilateral loans (and market lending)

One first option is to update regularly the stable resources of the Fund, either the quotas or the NAB (quotas and NAB are in practice quasi-permanent IMF resources). As we saw in Chapter 2, the funding for the period 2008-2011 has been covered mainly with bilateral loans and the NAB, and it will continue this way until the ratification of the doubling of quotas (expected in 2013/2014). However, the Fund should sustain its character of quota based institution, as explicitly recognized in the NAB reform. Therefore, the aim should be a regular update of quotas.

The IMF normally conducts a five-year general review of quotas, but the 2010 quota reform included a commitment to review the quota formula in 2013 and advance to 2014 the XVth General Review. As we saw in Chapter 4, after the reforms of 2006-2008 and 2010, the criteria of selective general increases supplemented by ad hoc quota increases has settled down (compared to the previous equiproportional criteria), ensuring that any future increases will go in the direction of bringing the share of each country to its relative weight in the world economy (measured by the formula).

However, traditionally there has been reluctance to regular increases of IMF quotas, both because of governance considerations, and out of caution against giving more financial leeway to the Fund. This reluctance is still very much alive and very likely to continue in the future, even more so once it has been reached the psychological threshold of a trillion dollars in quotas and NAB resources. Therefore, it is unlikely to see significant quota increases in the next GRQs, beyond small increments to correct misalignments between calculated and actual quotas in favor of the most under-represented countries, along the lines of the 2006-2008 ad hoc increases. The requirement of an 85% qualified majority rule (including veto power by the US) to decide the increases, will continue slowing this route.

The exception could be another major global crisis to facilitate a political agreement to promote a new escalation in the IMF resources, as happened in the last general quota increases in 1998 and 2010, respectively linked to the Asian and global financial crisis.[15] However, even if the need for additional resources arises, it is likely that the first step would be financing them through official bilateral loans of a temporary nature. This is the kind of initiative that we have seen in 2012 with the G20 committing almost half a billion US$ in temporary bilateral loans and Note Purchase Agreements.

15 For 2010, the main determinant of the duplication of quotas has been the governance reform. In any case, the quota increase will absorb most of the bilateral loans granted in 2009 and the NAB increase approved in April 2010, which are determined by the need for resources to the global financial crisis.

Finally, it should be noted that the Articles of Agreement also allow access to private sector loans. This is however an option that has never been used, mainly due to political difficulties and the reluctance of countries to a Fund financially dependent on the markets. It would be worthwhile to reopen this debate, particularly in the case of insurance facilities (FCL, PLL), which by design are much less likely to be used by the country.

A.2 Strengthening cooperation with RFAs

A second option is to strengthen the co-financing of programs with RFAs, which allows the sharing of resources and giving more financial support to the country. As indicated in Chapter 3, this cooperation allows to exploit comparative advantages of the Fund (expertise in the design and program implementation) and of the regional arrangement (greater proximity to the problems of the region). It also allows for a stronger link between the source of the resources and the risk of contagion, focused especially on the region, because the economic integration of the country at risk with its neighbors.

So far, the regional agreement with a greater capacity for active cooperation with the IMF is the European Stabilization Mechanism (ESM). The EU has a framework of supervision and monitoring of European economies through the Commission and the European Central Bank that is a prerequisite to the articulation of an effective lending policy, and a necessary condition to perform the monitoring and implementation of the program when activated. Furthermore, the mechanism is adequately resourced (the ESM will have € 500,000 millions for loans) to sufficiently cope with crises of its member countries.

In Asia, the Chiang Mai Initiative also has the potential for further cooperation with the IMF, but still has to develop a strong regional monitoring structure. In the current framework, Chiang Mai does not have sufficient institutional resources, and delegates in the IMF the program design and implementation. Outside the EU and Asia, there are no agreements of entity that could allow for more active cooperation with the Fund and it remains to be seen that can be developed.[16]

Future collaboration with regional agreements will depend, therefore, on the impulse that these agreements receive. So far, with respect to this collaboration, the G20 has identified a set of general principles to limit inconsistencies, including aspects such as: permanent dialogue, early cooperation, compatible conditionality, coordinated oversight depending on the comparative advantages of each institution, respect for the rules and procedures of each of the parties involved and the preferred creditor status of the IMF.[17] From the experience of cooperation with Europe some considerations may be drawn both in coordinating the bailouts and in the surveillance.

Regarding the coordination of programs, a particularly interesting development is the joint announcement of the program and its strategy. The Fund has unsuccessfully tried to promote a joint mechanism called Global Stabilization Mechanism (GSM), that in future scenarios of global or regional systemic crisis, would issue a signal of the international institutions reporting on their ability and willingness to meet the needs of its member countries.[18] Any such mechanism would generate confidence

16 In Latin America has been notorious the failure of Bank of the Americas and initiatives such as the 1988 FLAR have concentrated very little resources (see Chapter 3). More recently, in 2013 the BRICs have announced a joint Contingency Reserves Arrangement (CRA) with an initial size of US$ 100 bn, which nonetheless remains on the low size of resources.

17 The debt with the IMF is senior with respect to contracts with the regional agreement. Again the IMF-EU cooperation is setting a precedent for maintaining the preferred creditor status of the IMF.

18 The IMF proposal includes offering all the policies that have actually been implemented at various times since 2009, including: the announcement on the mechanisms to ensure the adequacy of financial resources and liquidity of the IMF (NAB activation and Fund bilateral borrowing); the menu of facilities for affected countries (from FCL to SBA), with the possibility of a general invitation to avoid possible stigma problems associated with being the first applicant, and coordination mechanisms with other institutions and the private sector (Vienna initiative type). IMF (2010n).

in the markets mitigating the effects of a crisis. The difficulty lies deciding when it will be activated, because the activation itself may have a reverse effect on the markets fueling a possible situation of growing distrust.

Another important aspect is the coordination of program design. The programs with Greece, Ireland and Portugal are setting a precedent. These are programs coordinated among the three mission chiefs: from the IMF, the ECB and the Commission, so that the IMF (and EU institutions) loses autonomy in program design. There is also the principle of ownership of the program by the authorities as an element to improve the chances of successful implementation. This is a negotiating structure that inevitably will generate internal disputes that will need to be sorted out. In the future, it seems plausible to consider unifying the negotiating team under one head of mission. Here, the Fund has greater expertise, albeit the EU is committing larger amount of resources.

Beyond program coordination, it will also be important the consistency in the surveillance and diagnosis of the country. This will be especially relevant in the case of FCL-type precautionary funding, which requires monitoring and coordinating the eligibility criteria. It remains to be seen whether regional agreements will or not incorporate insurance facilities. For now, only Europe contemplates this possibility, after a long internal political debate.[19] For example, in this case, the strengthening of the Stability and Growth Pact, and the new pact for the euro, represent a de facto requirement that exceeds the eligibility criteria of the FCL.[20]

A.3 Creating liquidity by the IMF

The IMF could also guarantee sufficient resources through the creation of its own liquidity. This is an option that has been discussed repeatedly, especially regarding its potential role as a lender of last resort, and can be traced back to the very origins of the Fund, with the proposal of Keynes's bancor as an international monetary unit. In practice, this function has run into opposition from key partner countries, not interested in a Fund with supranational central bank functions. There seems not to be a viable option in the medium term, at least not in the classic sense attributed to Bagehot.[21]

More recently, the debate is being posed in terms of the reform of the international monetary system, which has been a priority of the French Presidency of the G20 in 2011. In this sense, it can be thought of gradual changes in the direction of a greater weight to the Fund in the IMS. An important element is the role to be played by the SDR. Thus, the G20 London Summit in April 2009 passed an issuance of SDR 250,000 million, distributed among member countries in terms of the quota. The Fund urged the signing of voluntary agreements of purchase and sale of SDR, between institutional agents to promote its use.

However, the SDR is not a currency of international use, and their utilization would require the conversion to a market quoted currency. It also presents important legal restrictions because the IMF Agreement requires a 85% qualified majority to approve or cancel the emissions, which also must be based on the existence of a global need for reserves. The Fund is trying to promote a greater role for the SDR with pragmatic proposals such as allowing its use by the private sector, expand the basket of currencies, or use it as a reference in international economic data (see Chapter 3). However, there is quite a reluctance within the Board to promote a greater role for the SDR, whenever not a clear

---

19 The EFSF does not incorporate initially precautionary funding. After several European Councils throughout 2011, eventually, in the July 2011 it was agreed to incorporate it to the ESM.

20 Poland requested the FCL to the Fund without previous consultation with the European institutions creating some discomfort in Brussels and gave way to a process of consultation and prior information within the ECOFIN for future programs with the IMF.

21 The traditional functions of Walter Bagehot (1826-1877) established that "in a crisis, the lender of last resort should lend freely, with a penalization rate and with good collateral" (quoting from Fisher, 1999). For a discussion of the main elements of the debate on the IMF as lender of last resort see Fisher (1999).

opposition.[22] It does not seem likely to see a significant increase in the role of the SDR, beyond specific reforms to improve its usability and, in the medium term, the inclusion of the renminbi in the basket of currencies that compose it.

An interesting variant is the ability of leveraging by the IMF. Loans from the IMF are supported in a 1:1 ratio between the committed resources under the program and the resources of the GRA that are immobilized.[23] Alternatively, the Fund could approach the operations of a private bank, and leverage its loans. This is a possibility especially important in the case of precautionary facilities, in particular the FCL. As we saw, the three FCL granted to Mexico, Poland and Colombia accounted for 33% of total resources allocated between 2008 and 2011. Therefore they pose a high burden on the resources of the Fund because, even if the resources are not used, the IMF must immobilize the total amount, and cannot be used for other loans. However, the FCL are precautionary loans to countries with good behavior in which there is a high expectation that the resources will not be used. In this context, a 1:1 ratio seems excessive and could be considered to be risen, especially in cases of FCLs granted simultaneously to several countries with different regional risks.

If the intention is to consolidate the FCL as a substitutive for reserve accumulation, the countries must be confident it will be readily available (given the quasi-absolute availability of reserves)[24] with the simple fulfillment of eligibility criteria. At the limit, we will have a situation of indefinite renewal of the FCL, which will make it a perfect substitute of reserves. It is, in any case, difficult to implement such an option for the foreseeable political resistance from the same countries that have been against the FCL.

B SUSTAINABILITY

The lending policy should be financially sustainable and should also avoid introducing inefficiencies in the international economic system. Financial sustainability requires effective programs to resolve the country's crisis and ensure that the Fund recovers the resources to continue lending to other members. It also will require preventing a lending bubble in the Fund that could question the viability of all programs jointly granted. Such systemic inefficiency problems stem mainly from the moral hazard that the programs may introduce in terms of less sound economic policy behavior by the countries (country moral hazard) or higher risk taking and less demand for quality by international investors (investor moral hazard), because they have the security provided by the IMF rescue. A third type of moral hazard is the IMF itself, for its dual role as supervisor and lender, and the conflict of interest of the first to determine the objectives of the second, acting on behalf of and justifying the program (see Chapter 3).

The easing of the crisis resolution facilities and the introduction of insurance facilities intensifies this debate, as they introduce greater access to IMF facilities. Notwithstanding the caveats seen in Chapter 3 about the relevance of moral hazard (in decline), the concerns about it can be tackled through four main channels: (B.1) surveillance, and coordination of economic policies; (B.2) conditionality; (B.3) private sector involvement in crisis resolution, and (B.4) exit strategies.

B.1 Surveillance and coordination of economic policies

Effective surveillance is a necessary precondition to the lending policy, as it reduces country moral hazard and the possibility of a crisis. The Fund should in time alert of the risks

22 Especially on the part of central banks, because the threat it poses in the design of domestic monetary policies.

23 As for the burden sharing between the various sources – quotas, NAB and bilateral loans – the IMF has handled various ratios depending on the availability at each moment. It have been handled ratios between 1:1 (bilateral loans: quotas) and 2:1 (IMF, 2009f). With the activation of the new NAB in 2011 until the ratification of the quota increase in 2013/14, provides for a temporary 3:1 ratio (bilateral loans/NAB: quotas).

24 Subject to legal restrictions that each country may establish regarding the use of reserves, and to the calculation of the effects that the recourse to reserves may have in the capital markets confidence.

that the countries or the global economy as a whole are incurring in, and should have an influence on the ability to take corrective measures. However, the Fund surveillance has demonstrated important drawbacks that have limited its effectiveness. In this field, the IEO has carried several reports warning about critical shortcomings.

Regarding the IMF surveillance of advanced and large emerging economies the IEO points out that have been less effective than with other countries, which is especially serious given their systemic character. The Fund has paid little attention to strategies to seek a greater influence of its diagnoses and recommendations and even to the management of the pressures on the staff to present overly cautious assessments. The IEO recommends replacing bilateral surveillance under the Article IV reports with strategic programs with specific goals to better assess accountability, and to enhance communication strategies with the authorities and markets (IEO, 2010).

On multilateral surveillance, the IEO has noted the absence of a strategic line for the whole institution. The main products – the WEO, the GFSR and Regional Reports – are elaborated by different departments[25] working as compartments with little coordination between them. The result is a loss of interconnection among the products and potential inconsistencies, such that the joint monitoring product is less than the sum of the parts. Moreover, multilateral surveillance is too focused on the analysis of economic situation and outlook – something which is already done by many private analysts – and relies too much on a bottom up process, explaining the global behavior from the analysis of countries, faced to an increasingly horizontal and global markets reality. The IEO recommends to focus more on the economic policy linkages and their overall impact and to place the IMF within a peer supervision scheme within groups with capacity to influence decisions (Gs), and reinforce the IMFC's role in this respect in order to gain traction (IEO, 2006).

Along this line, the IMF has strengthened its surveillance mechanisms, and in 2011 carried out its triennial surveillance review, which confirms the reforms that have been introduced since 2009 in two main directions (in line with the recommendations of the IEO): integration between multilateral and bilateral surveillance, and the strengthening of financial surveillance (see Figure 1.8). All these initiatives have yet to be evaluated, especially in light of their ability to influence the policies of systemic economies;[26] the 2014 Triennial Surveillance Review will be a good opportunity to assess them. To ensure their effectiveness they will require interdepartmental coordination within the Fund to avoid duplication and inconsistencies between multiple products, and not to fall into overproduction, and surveillance fatigue in the countries. In this coordination, it is particularly important the role of the Strategy, Policy and Review (SPR) Department which should ensure consistency of reports and a common and global strategy of the IMF.

In parallel, it will also be important to seek coordination with third international agencies to avoid duplication. Thus, to the new IMF surveillance initiatives must be added those of the OECD or the FSB, or new regional measures, especially intense in the EU countries,[27] which are creating a supranational supervisory structure. For example, systemic economies will have a dual supervision of financial systems through the FSAP of the IMF, and the country examination of the FSB. This is a case in which at a minimum, there should be flow of information between supervisory teams, and in time, joint reports could be an option.

Finally, on traction, Chapter 1 analyzes how the G20 is driving a new global surveillance scheme in which the IMF is playing a central role, along with the FSB. Probably

25 Research department (WEO), monetary and capital markets department (GFSR), and the respective geographical departments.

26 L´Hotellerie-Fallois (2011) notes the importance of tracking the recommendations of the Fund, not only to determine whether actions have resulted in economic policy, but also to analyze the quality of these recommendations and its consistency over time.

27 See Chapter 1, footnote 53.

the most important, is the exercise of economic policy coordination through the Framework for Strong, Sustainable, and Balanced Growth, and its main instrument, the Mutual Assessment Process (MAP). The IMF plays a central role in the MAP by preparing the technical reference report for the joint analysis of the policies of the G20.[28] Being a process directly involving those responsible for the economic policies (Prime Ministers, Ministers of Economy, and central bank Governors), it is the instrument with more potential to influence policy. However, it will need to strengthen its mechanisms of persuasion, even more so when the focus is now turning to exit strategies. For example, an option could be to formalize the MAP, giving the IMF a role as independent reviewer of the policies of the countries (beyond its current role of technical analysis of the policies set out by the G20 countries themselves).[29]

B.2 Conditionality

Conditionality is the main instrument available to the Fund to try to shore up the program's effectiveness. It is also a deterrent of country moral hazard because it will require harsh measures if the country incurs in crisis. However, the new scheme of lending policy allows access to more resources, with larger upfront payments, and a much more flexible conditionality (absent in the case of the FCL). In short, in pure theory the new conditionality framework reduces the lever on the country and raises the country moral hazard. There are nonetheless a number of elements that limit the extent of moral hazard.

First, in practice, the crisis resolution facilities maintain a relevant conditionality. Thus, the quantitative performance criteria continue to impose strict conditions for fiscal and monetary policy. On the other hand, we have seen how structural conditionality begins to become important from the 1980s and starts its fall 20 years later, when their effectiveness and criticality to the program success is put into question. In any case the structural benchmarks are retained to guide possible reforms. Large down payments are also necessary in a context in which the balance of payments crises has a high component of confidence.

Second, regarding precautionary facilities, an option could be to limit their use by linking them to specific contingencies reaffirming their insurance role; for example, limit them to a menu of exogenous shocks such as price volatility of raw materials, or to the investor type or the capital flow covered (e.g. discriminate between domestic and foreign investors,[30] or between portfolio vs. direct investment flows). However, for large economies with ability to influence international markets, it is difficult to discriminate which one is an exogenous shock. Furthermore, excessive casuistic would eliminate the insurance function via signaling complexity to markets. Agency risks associated with precautionary lines should be monitored through surveillance, the annual review of strict compliance with the eligibility criteria.

Finally, in general, the Fund's lending experience has demonstrated the need for ownership of the program by the authorities as a necessary condition to ensure its success. It is therefore more important to work on the persuasion and influence of the IMF, rather than in imposing conditions. To use an analogy, there is a shift in the strategic approach to programs from an authoritarian teacher governed by the motto "spare the rod and spoil the child", to a teacher who provides the tools, resources and technical support

28 Although it draws from contributions of the G20 countries.

29 Legally, the surveillance policy is based on Article IV of the Agreement, which develops the obligations of member countries, and in the monitoring the decision 2007 (updated 1977), which guides the responsibilities of IMF member countries in supervision. Formally, the monitoring of spillover effects is contemplated only when transmitted through the balance of payments of the country and not necessarily, as in the current crisis, when the channel has been financial.

30 Alberola, Erce and Serena (2011) observed as foreign capital acts independently the level of reserves of the country, while the domestic capital does flow positively to the country the higher the level of reserves. Therefore a more effective FCL would attract domestic capital.

for the country to develop its own policies. It is a strategy more in line with the new reality of globalization and of instant economic, financial and information flows. Time will tell if it is effective.

B.3 Private sector involvement

The main instrument to contain investor moral hazard is the involvement of the private sector in the resolution of the crisis. To the extent that the investor is aware that it will be part of the solution, he would calibrate better the risk taken in their investment decisions.

In 2002 the IMF tried to articulate a mechanism for the involvement of the private sector through the so called Sovereign Debt Restructuring Mechanism (SDRM), whose main promoter was the then first Deputy Managing Director, Anne Krueger.[31] It was based on the intermediation of the IMF in situations of unsustainable debt, a sort of international mechanism of sovereign bankruptcy resolution (avoiding litigation subject to different laws in each country). The exit package of this mechanism would include: an adjustment program, debt restructuring and financial support from the IMF. The SDRM failed, mainly because of the US refusal despite their initial support.[32]

Since then, the international community has pressed for market solutions through mechanisms such as collective action clauses in bonds emission or secondary bond markets[33] or more recently, through contingent convertible bonds. Along the same lines, in the context of the resolution of the effects of the crisis in the Central and Eastern European countries, the EBRD launched in January 2009 the European Initiative for Banking Coordination or Vienna Initiative. This is an informal, non-binding dialogue framework among authorities, international institutions that contribute to the rescue (EBRD, IMF, European Commission), and the private banking sector, which discuss adjustment scenarios and financing commitments of the various parts.

The result of the dialogue has led to a commitment made in a joint public declaration of private banks, to maintain their exposures and capital levels in the countries, above agreed thresholds. This initiative has been very useful, because it has allowed that foreign private banks keep their funding commitments in countries such as Hungary, Latvia and Romania, resolving the prisoner's dilemma that arose from not knowing the competitor's strategy, and the incentive to be the first to leave the country to avoid further losses.

But, probably, the involvement of the private sector should go further and include the possibility of debt restructuring in the event of serious solvency crisis for which it is no sufficient the combination of domestic adjustment with private and official financing. The success of the exercise will depend on the ability to articulate a framework for effective dialogue between authorities, official financing and private creditors, a sort of SDRM-II to recover the simultaneous determination of financial support, internal adjustment and restructuring.[34]

B.4 Exit strategies

Finally, another element that can help the sustainability of the lending policy is the articulation of clear exit strategies of IMF programs to avoid situations of continued exposure to certain countries that limit access to resources to third parties. The exit strategy reduces moral hazard by eliminating the expectation of a continued rescue.

In the case of crisis resolution programs, the IMF has been implementing since 2000 a stricter policy of monitoring the programs once expired, establishing a post pro-

---

31 For a detailed analysis of the SDRM see Krueger, 2002. Anne Krueger has recently recovered SDRM proposal type along with other authors, to apply to the European Regional Funds (Gianviti et al., 2010).

32 For an analysis of the political economy of the rise and fall of the SDRM proposal see Setser, 2008.

33 The ESM contemplates buying bonds in the secondary market of member countries in sovereign debt.

34 In 2013, the Fund is expected to review its framework for sovereign debt restructuring.

gram evaluation when the country still has a debt of over 100% of the quota. Moreover, since 2003 the Fund conducts ex post analysis of long-term programs (situations in which the country has a loan with the IMF in at least 7, out of a 10-year period), in which the staff has to make an evaluation of previous programs and justify the need for renewal.[35]

The case of the precautionary facilities is different, in so far as they do not necessarily involve release of funds, they are not subject to ex post analysis. Their nature is different, they insure against exogenous shocks and, in case of use, the guarantees are higher because they are granted only to economically sound countries. Implicit in their design it is to limit the demand of crisis resolution programs by bolstering market confidence and limiting contagion. Further, to the extent that facilities such as FCL should represent a substitute of excessive reserve stocktaking –undesired by its global destabilizing effects – they may have a permanent character, to ensure its availability to the country (thus securing the same type of availability than reserves).

Therefore, the FCL probably should not have an exit strategy and rather have a more permanent use, although again, through strict compliance of qualification criteria to control for moral hazard. This debate will be taken strongly from 2013, in view of possible renewals of existing FCL with Mexico, Colombia and Poland, and with the review of the FCL projected for 2013/14.

C PREDICTABILITY

The loan policy should provide a predictable framework, so that member countries and markets can interpret the various facilities and signals they entail to avoid stigmatization of programs. Otherwise, you lose the effectiveness of programs and incur the risk of disuse. Similarly, there must be some clear rules, a certain stability of lending policy, and equal treatment among member countries in the provision of access to the various facilities, i.e., equal access under similar economic circumstances.

In pursuit of a predictable framework, two main elements are involved: (C.1) transparency about the nature of the various facilities and their consistent implementation, and (C.2) institutional balance of power, as a guarantee that the changes in lending policy will be made in the interests of its members.

C.1 Transparency: nature and application of lending facilities

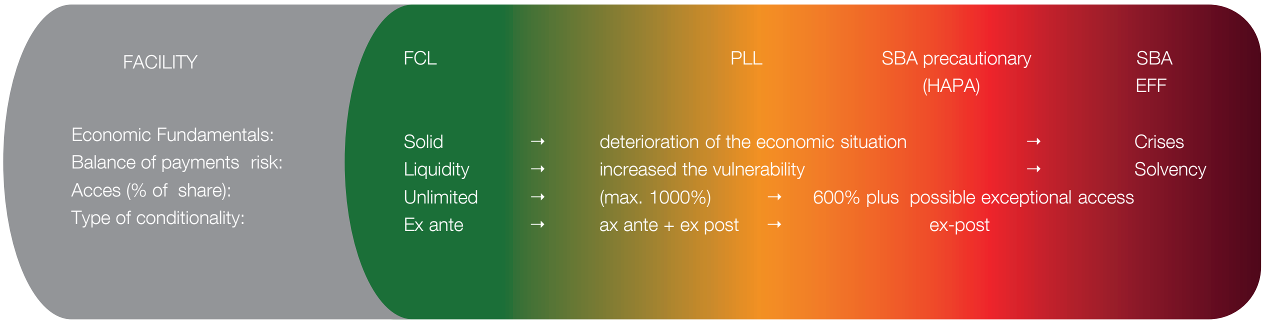
The nature of the various lending facilities is established in the very design of each facility. As we saw in Figure 5.4 the different facilities of the GRA are designed for different types of contingencies, which materialize in different types of conditionality (ex ante in the case of the FCL and the PLL). The current framework is theoretically a continuum of facilities, represented in Figure 5.7.

In principle, there is a continuum in which the facilities are organized according to the type of balance of payments risk, – which is linked to the economic situation and policies –, and conditionality is modulated accordingly. On the far left, the country has a "green light", their situation is solid, but faces a possible liquidity risk in the balance of payments as a result of exogenous factors. For these countries the FCL provides unlimited access which does not require conventional ex post conditionality (only ex ante eligibility criteria). At the other end, the country is in "red light", is facing a crisis and an insolvency problem of balance of payments. These countries are offered either an SBA or an EFF (the main difference is the higher repayment period of the EFF), with a 600% quota access, expandable through exceptional access, and subjected to an adjustment program with ex post

35 This policy is implemented after the first report of the IEO 2002, where the long-term programs are analyzed. The IEO found that, compared to the other programs, long-term programs have more optimistic projections, minor fiscal adjustment targets, and insufficient emphasis on key institutional reforms (IEO, 2002).

THE CONTINUUM OF THE FACILITIES UNDER THE GRA

FIGURE 5.7



SOURCE: Based on IMF information.

conditionality. Using a crude analogy, the continuous would go from platinum countries (FCL), to silver countries (PCL, HAPA), to brass countries (SBA, EFF).

The lines are much less clear in the "orange" part, the precautionary window of the PLL and the precautionary SBA (identified as HAPA if access is high). In both cases, the country has vulnerabilities and is offered a precautionary agreement, HAPA or PLL depending on what authorities request and the judgment call made by the staff and the Board. The degree of ex post conditionality is also diffuse, although it is defined as more focused and limited in the case of the PLL. On access, paradoxically the HAPA (presumably applicable to the worst economy) could theoretically have superior access than a PLL via the exceptional window access.

In both cases the IMF provides a seal of approval that may catalyze private sector resources. There is, however, a strong difference between the PLL and the HAPA in terms of signal to the markets. The PLL indicates that the country is fine, but not good enough to obtain a FCL, so the access is limited, and ex post conditionality is added. In the HAPA, the signal is more positive: the country is facing balance of payments problems, but signaling to the markets its capacity to solve them with a program supported by the IMF, and in principle, without accessing the resources it provides.

Nor is it clear the line between the FCL and the PLL. In theory, the FCL is for countries in better economic situation, but there is a dependence on the judgment made by the staff on the strong or moderate implementation of the eligibility criteria. In practice, the eligibility criteria favor that the PLL be granted to small closed economies, and the FCL to large open economies. The confusion is even greater after the introduction in November 2011 of the liquidity window of the PLL, which was originally aimed at any country with solid fundamentals but with a material need of short-term liquidity (probably closer to the fundamentals required for an FCL, but channeling it through the PLL). Arguably, there are two separate categories of continuous access to the facilities: (i) one for advanced and large emerging economies with access to FCL, PLL (liquidity window), HAPA and SBA, (ii) and another, for all other countries with access to PLL (precautionary window), HAPA and SBA.[36]

The creation of the PLL in August 2010 answers largely the demand for a precautionary facility for emerging and developing economies that, in fact, did not have access to the FCL. However, the result has been that the theoretical continuum among the four facilities is vague and could lead to problems of stigmatization. These difficulties could be solved by integrating the PLL (precautionary window) and HAPA, maintaining an independent liquidity window and establishing a genuine insurance access through an FCL to any economy with a strong economic situation.

36 The programs granted seem to corroborate it. Of the four precautionary lines granted up to 2011, the three FCL have been awarded to Mexico, Poland and Colombia, and the only PCL to Macedonia.

Finally, predictability is achieved by ensuring the stability of the lending policy, and promoting access to resources under the same conditions for all member countries. To the extent that the IMF decision mechanisms reflect the diverse interests of its member countries, and they are a good reflection of the relative economic weight of the countries, the greater the safeguards to ensure that future lending policy reforms will be made taking into account the interests of all its members.

As we saw in Chapter 4, as of 2009, in line with the establishment of the G20 as the premier forum for international economic coordination, there has been a profound reform of IMF governance to be ratified in 2013/14. The result will be a stronger link between quotas – and voting power – with the countries relative weight in the world economy, and a reform of the Board with a better balance among advanced, emerging and developing countries. Furthermore, informally, the G20 itself has had a growing influence on the policies of the Fund. One way forward would be to adapt the structure of the Board and the G20, which means changes in the Board, but also in the G20 (incorporating developing economies now absent).

In short, the Fund is now an institution much more balanced in its decision-making structure, thereby offering greater guarantees so that any change in lending policy will necessarily consider the interests of advanced, emerging, and developing countries.

Final notes: displaying the IMF wings

> You can't always get what you want
> But if you try sometimes well you just might find
> You get what you need
> *(The Rolling Stones, 1968)*

In response to the global financial crisis, the G20 has launched a series of far-reaching initiatives laying the foundations of a New International Economic Order (NIEO) based on three main elements: the configuration of the G20 as the forum for economic coordination (replacing the G7), the strengthening of the institutional pillars of the Bretton Woods system – IMF, World Bank and WTO –, and the establishment of a new pillar of financial regulation and supervision, the FSB.

However, the nature of financial crises and the institutional framework needed to contain it are issues still far from being settled. As noted by Reinhart and Rogoff (2009, p. 292), financial crises can hardly be avoided however perfect the system of regulation. In this scenario, agile and flexible tools are needed to address crisis situations, and nobody discusses the role to be played by the IMF as a central economic institution of the NIEO in a context of economic globalization, which requires global solutions.

The purpose of this work was to analyze the transformation of the Fund between 2009 and 2011 in response to the global financial crisis. This analysis shows that there have been very substantial changes in all of its major fronts – governance and institutional culture, surveillance and lending policies, and resources – which represent the beginning of a metamorphosis in the operations and functions of the Fund that introduce new challenges and will determine its future role.

The reforms have been developed in a short period of time, under the pressure of events and under the urgency to respond to the crisis. Looking ahead, the challenge is to consolidate and to address the problems that these reforms could introduce. The ultimate goal is to achieve a more solid Fund and qualified to be the guarantor of the new IEO. In other words, the IMF must complete the process of metamorphosis and spread the wings.

Starting the Metamorphosis

The changes in IMF *governance* acquire historical character, affecting the formal and informal decision making structure. The reform of the formal structure means a more balanced weight between advanced and emerging economies. Between 2006 and 2008 the Fund has changed the formula of the quota after over 60 years of maintaining the statu quo, and has advanced ad hoc increases in quotas in favor of the more underrepresented countries. The new formula benefits emerging economies by introducing a high component of GDP valued at purchasing power parity (ppp).

In 2010, this reform is completed with the doubling of the quotas and their distribution in favor of the most under-represented countries (under the new 2008 formula), and the most dynamic emerging countries. Once ratified (expected in 2013/14), it will result in a historical correction of a misalignment inherited from the very foundation of the Fund, because the quotas did not properly account for the differences in the countries relative economic growth over the years. Therefore, quotas were not a reflection of the weight of countries in the world economy, affecting mainly to the emerging economies. Also in 2010, the Board approved an amendment to reduce by two the number of directors of advanced European countries, again balancing it in favor of emerging countries, and reducing the European "rolling pin" in the Board meetings.

On the other hand, there have been profound changes in the informal decision-making structure, most notably the replacement of the G7 by the G20 as the premier forum for strategic direction of the Fund, and a shift in the institutional culture. The so called Washington Consensus – that dominated the doctrine of the Fund from the 1980s – has given way to a new approach of which the contours are still not clearly defined, but closer to the new Keynesian economics, that advocates the effectiveness of macroeconomic policy and regulation in certain circumstances, and advises to adapt policies to the specific circumstances of each case.

The crisis has revealed significant weaknesses in the *surveillance* exercised by the Fund, that has quickly reacted in two main directions: the integration between multilateral and bilateral surveillance (from a perspective that has traditionally been country-based), and the strengthening of financial supervision, including strengthening the expertise of the Fund (traditionally macroeconomic rather than financial). These new scope is formalized in 2013 with the approval of the Integrated Surveillance Decision (ISD), but previously, since 2009, a number of new measures and products have been launched: a new Global Policy Agenda report (integrating the key findings and recommendations of the WEO, the GFSR and the Fiscal Monitor), an early warning exercise (EWE), new cross-country thematic reports, reinforcement of articles IV of systemic countries with an additional report on spillover effects (spillover reports), or the introduction of regular Financial Sector Assessment Program (FSAP) for countries with systemic financial systems. The Fund is also playing an important role as external referee in the Mutual Assessment Process (MAP), the main instrument of the new framework for international coordination of economic policies developed by the G20.

More significant are the changes in the *lending policy*. The new policy is characterized by two main components: a more flexible policy for crisis resolution, and a new insurance function. The lines under the General Resources Account (GRA) are simplified by reducing them to two lines – the Stand-by Arrangements (SBA) and the Extended Fund Facility (EFF) – to cover balance of payments difficulties regardless of its origin, thereby eliminating the Fund's casuistic of the different types of distortions. These facilities are now more flexible, both because of the lower conditionality, and of a larger and more flexible access to resources.

Under the principles of ownership of the program by the country authorities and criticality of the measures, the ex post conditionality of the programs has been reduced and limited to quantitative macroeconomic performance criteria and structural benchmarks. While this is a change that had been brewing for a decade, it was not until 2009 when it is given a definitive step to eliminating structural performance criteria, removing the Fund from the criticism of intrusion. Thus, the Fund changes the course of a 50-year history of programs loaded with conditions and the subsequent disbursements of the loans will be based more on an overall assessment of the program.

On the other hand, the access to resources is made more flexible in three ways: doubling normal access limits (up to 200% of annual quota and 600% for the total program), simplifying the criteria for exceptional access above these limits, and the staggering (in a staircase pattern) of disbursements in function of the country's needs, including front-loading of disbursements. As was evidenced in the second half of the 1990s, the capital account crises spread quickly and have a sudden character, requiring quick access to a large amount of resources to restore confidence of international markets. Here again, the 2009 reform is redirecting the trend of lending policy, which was historical based on staggered and limited loan disbursements, as a guarantee that the country could repay the loan.

Along with the new framework for crisis resolution, the Fund activates a new insurance function based on two new instruments: the Flexible Credit Line (FCL) and Precautionary and Liquidity Line (PLL). The scheme is completed with the so-called HAPA

(SBA precautionary programs with high access), also with preventive functions. Although the former CCL (1999-2003) pointed out in this direction, it was never used because of stigma problems. The rapid spread of the global financial crisis makes it necessary to retry establishing an insurance function in the IMF, this time redesigned to ensure its use and effectiveness.

The PLL and the FCL introduced two changes especially significant in the Fund's lending policy: (i) elimination of ex post conditionality (substantial loss of weight in the case of the PLL) and replacing it with eligibility criteria (or ex ante conditionality) as a requirement for access to resources, and (ii) reinterpretation of the balance of payments need test, so as to enable preventive resources for a country in which, not only there are no balance of payments needs, but there is an explicit recognition about good economic situation. In that way, two criteria that had dominated IMF loans since its inception in the 1950s, are reversed.

In short, the change in lending policy confirms the conventional view of the crisis as an opportunity. The global financial crisis has made way for a new lending policy, details of which had already been outlined before, but not approved until the crisis demanded immediate attention to the financing needs of member countries.

Unfolding the wings (the challenges)

The transformation of the NIEO started in 2009 must now consolidate. After the intense start in 2009 and 2010, the reform momentum has been decreasing, partly because advances in the first two years have been very significant, but also because there seems to appear some reform fatigue in the G20 and a desire to refocus the work on the more fundamental issues. It is likely that in the coming years, new initiatives will be reduced and the emphasis will be placed on the implementation of those already ongoing specially on financial regulation and supervision, and international economic policy coordination (MAP); and in shaping them as their effectiveness is assessed once they are implemented.

The same type of scenario arises with respect to the Fund. It will be important to test the effectiveness of the new lending, surveillance, and resource policies, and its governance, to adapt them accordingly. Taking an approach of principles, we may consider the challenges faced by these policies and to evaluate possible alternatives to address them. To sum up – and notwithstanding the risk of simplification and the difficulties of partitioning a reality of high-interaction between policies –, we can pose the major challenges in terms of five broad principles associated with the different policies: legitimacy (especially associated with governance), effectiveness (surveillance), sufficiency (resources), sustainability and predictability (both associated with the lending policy).

The challenge of institutional *legitimacy* primarily affects governance and institutional culture. The reform of 2010 should be completed in 2013/14, and a new Board will be born more balanced between advanced and emerging countries, both in quotas and composition of the directors. The quota weight of the advanced economies will stay around 60%, and in the number of directors, the emerging and developing countries will have about fourteen out of twenty-four. It remains to be seen who will get the two chairs lost by advanced European countries; so far, in the 2012-1014 rotation, emerging Europe has benefited of 1.6 chairs (mainly because of the access to the position of Director of the Czech Republic, Hungary, Poland, and Turkey, within their respective constituencies). It would be good to take advantage of these changes to seek a rapprochement between the compositions of the Board and the G20 to ensure consistency between the two forums.

However, after more than 60 years of the G7 preponderance (especially the US and Europe), the tensions on governance are not yet closed, and emerging economies are demanding even more weight. The G20 has already anticipated the mechanisms to address this challenge: to review the formula in January 2013, to advance the XV General

Review of Quotas to January 2014, and formally reconsider the Board composition every eight years. From this exercise we can expect a new adjustment in calculated quotas following the trend of approaching the weight between advanced and emerging economies towards a more balanced share, probably by way of an adjustment in the weights of the variables (probably linked to the elimination of the variability variable), rather than a revolution in the formula.

In order to prevent the recurrence of under-representation, it is more likely (and necessary) to see adjustments in time between actual and calculated quotas (i.e. between actual quotas and the economic weight of the country) – probably including a new ad hoc quota increase already in the XVth Review –, rather than through a general quota increase. These successive corrections should be reflected in time on the composition of the Board, for which it would be necessary to adopt less politicized and more automatic Board reforms, linking the positions of Executive Director to the quota-weight of the country. It can also be expected (and necessary) that sooner than later, and for the first time, the position of the Managing Director of the Fund shall be filled by a non-European (and from an emerging country), and thus complete the transition from the G7 to G20 in the strategic direction of the Fund.

Legitimacy also requires an institutional culture with more internal debate and a new theoretical paradigm fleeing from monochromatic recommendations. The path is already made, macroeconomic policies must balance multiple objectives and have to adapt to the circumstances of each country; and the importance of regulating the markets to correct failures and modulate incentives is recognized. On fiscal policy, the challenge is to strengthen the counter-cyclical component, so that the current consolidation process should set an adjustment path designed with budget allocations that minimize the negative impact on growth. Monetary policy will have to pursue the objectives of growth and employment, and price and financial stability, against the traditional orthodoxy centered on inflation targeting.

On the *effectiveness* of supervision, the lines are also plotted, the strengthening of financial supervision will continue and also the link between multilateral, regional and bilateral levels; thus reflecting a global economic reality that is less country-based and more complex and interconnected. The challenges arise especially in terms of the impact of the messages and appear on several fronts:

(i) Most incisive messages focused on policy recommendations. Messages should be more incisive so that they do not become lost within the reports. Further, while the IMF should clearly alert of a risk, the emphasis should be placed on policy recommendations to prevent negative signaling in the markets. In this respect, after failing in predicting outspokenly the global financial crisis, the Fund seems to be focusing excessively on the risks, following a sort of risk aversion to being accused of not having predicted the next one either.

(ii) Intra-institutional coordination. Reports have proliferated within the Fund, as a result of the crisis; which raises the risk of duplication and inconsistency in the messages. It will be necessary to improve coordination between departments (regional and horizontal) avoiding silo behavior.

(iii) Inter-institutional cooperation. International monitoring initiatives (FSB, OECD, G20) and regional (mainly EU) have also proliferated, creating an international supervisory labyrinth. Without prejudice to the institutional independence and usefulness of evaluations from different sources, there is a risk of mixed messages to be lost in a "haystack" of recommendations. It will be important to develop adequate institutional cooperation, with at a minimum, exchange of information flows and assessments, even at the technical level. In some cases, to redefine or unify reports considering comparative advantages, especially with the G20 MAP and the FSB.

(iv) IMF accountability. The Fund also makes mistakes, and they should be recognized. Here the IEO has played and will continue to play a central role, reviewing independently and with the perspective that gives the course a few years the Fund policies (this is certainly a good institutional practice lacking for example in the EU). But recommendations of each year must also be monitored by the staff itself, evaluating in subsequent Article IV or multilateral reports if previous recommendations have been met or not and whether they remain valid, or are no longer accurate.

With respect to the *sufficiency*, it will be important to ensure that the IMF has sufficient resources to meet the needs of its members. The crisis and the new lending policy have exerted strong pressure on the resources of the Fund in the period between late 2008 and 2009. In recent years, bilateral loans (mainly from Japan and European countries) have maintained the Fund's resources. From 2011, the budgetary burden has been transferred into the expanded New Arrangements to Borrow (NAB), which transiently multiply their resources almost eleven times (from US$ 54,500 million to almost US$ 590,000 million). And, starting in 2013/14, resources will again be supported by quotas, once the agreed duplication is ratified. The Fund has risen resources from quotas and NAB to SDR 660,000 million (approximately US$ 1 trillion), from the 270,000, which it counted in 2008.

Ideally, the quotas should be adjusted over time to keep them stable in relative terms to key global economic indicators (GDP, trade, and capital flows). However, although they are periodically reviewed, experience shows that their increases occur abruptly in response to extraordinary situations, as happened in 1998 with the Asian crisis, and in 2010 with global financial crisis. Once reached the threshold of a trillion US dollars and taking into account the procedural difficulties – increasing quotas requires a 85% majority and parliamentary procedure in most countries – is likely to have resistance to increasing the quotas, beyond small size increases linked to under-representation. On the other hand, the chances that the Fund evolves into an entity with capacity to generate liquidity through issuing SDR are remote because there is no political support for a Fund working as a central bank.

It is more likely that, in case of need for additional resources, to resort to the temporary funding that provide bilateral loans or the issuance of notes to official creditors. This is the kind of initiative that was launched in December 2011 by the euro area with additional contribution of € 150,000 millions, later strengthened by other G20 countries at Los Cabos Summit in 2012, raising resources up to US$ 460,000 million. Other alternatives would be to borrow from the private sector – allowed by the IMF Articles of Agreement – or especially, the leverage of the loans in the case of lines like the FCL, which detract 100% of the value of the program from the usable resources of the Fund, even though there is an expectation that the resources will not be used. However, these are options that will require a shift in the Board aversion to rely on private creditors.

With regard to *sustainability*, the main challenge is the moral hazard associated with the Fund programs. While moral hazard is no longer the primary concern in the design of the lending policy, it is the main argument of the opponents to the reform. The new program framework with more flexible crisis resolution lines and the absence of ex post conditionality in precautionary lines theoretically increases the risk of unsustainable or reckless behavior in the countries benefiting from the programs and on international investors.

However, in general, a strategy based on the ownership of the program by the authorities and on monitoring its overall effectiveness has become more important to the success of a program than the old control of fixed conditions (often not met and waived). Furthermore, the Fund's insurance function compares favorably with other GFSN alternatives such as the excessive buildup of reserves, which introduce inefficiencies in the international allocation of resources; the central banks swaps, subject to uncertainty; or RFAs, which are not consolidated enough (even an integration process as advanced as the European Union has not been able to give a completely satisfactory answer). It is a necessary function that at least complements the rest of insurance alternatives.

In any case, several elements will be important to contain country moral hazard, including a close monitoring of programs and strict compliance with the eligibility criteria of the insurance lines to avoid "lowering the bar". A more effective surveillance and better international coordination of economic policies within the G20 will also be important to contain the risk of crises and unsustainable economic policies. The investor moral hazard will require greater private sector involvement in crisis resolution through a joint dialogue with authorities and institutions of the type of the Vienna Initiative and, in severe cases, the assumption of a restructuring process, ideally articulated together in an SDRM-type mechanism.

Finally, *predictability* will require transparent application of the lending instruments and their stability over time. Here, among the new facilities, the FCL, the PLL and HAPA do not have clearly defined boundaries and incorporate the risk of sending the wrong signals to the markets. These signals may eventually be clarified in time through their use, although here, the possibility of integrating the PLL and the HAPA has been raised, maintaining in parallel an independent liquidity window, and providing genuine access to FCL for any economy with solid fundamentals. On the stability over time, it is to be expected that the new instruments will be maintained in the medium term, in any case, the new governance structure of the IMF, with a better balance between advanced and emerging economies, guarantees that future policy reforms will properly take into account the interests of all member countries.

…

Between 2009 and 2011, the IMF has undertaken major reforms on all of its main fronts – its governance and institutional culture, its lending and surveillance policies, and its resources – that have relocated it at a central place in the International Economic Order. In this sense, the terms of a not so distant debate that reached up to 2008 on the loss of relevance by the IMF, have been reversed. Then, in the middle of a process of staff reduction, ironic hallway conversations circulated at the Fund, which questioned the end of the economic cycle thesis and hence of the role of the Fund: it was said that, the "most optimistic" among the staff argued that "a crisis would come", and boy, did it. The cycles are here to stay, and a strong multilateral institution is needed to support countries in their recovery path.

REFERENCES

ALBERICH, I. and MARTÍNEZ, M. (2000). “Cuotas y representación en el Fondo Monetario Internacional”, in *El FMI ante el siglo XXI*. *Perspectivas del Sistema Financiero*. No. 68, p. 47-71, January.

ALBEROLA, E., ERCE, A. and SERENA, J. M. (2011). *Are international reserves a useful tool to manage capital flows?: a gross flows approach*. Preliminary version presented at Banco de España workshop, February.

ALBEROLA, E. and SERENA, J.M. (2008). *Sovereign external assets and the resilience of global imbalances*. Banco de España Working Paper No. 0834.

ALBEROLA, E., Trucharte, C. and Vega, J.L. (2011). *Central banks and macroprudential policy. Some reflections from the Spanish experience*. Banco de España Occasional Paper No. 1105.

ARÍZTEGUI, J. (2011). Introduction to *Central banking in Latin America: changes, achievements, challenges*. Lecture prepared for the Fifth High-Level Seminar of the Eurosystem and Latin American Central Banks. Banco de España, Documentos Ocasionales, No. 1102.

ALONSO, J. A., FERNÁNDEZ DE LIS, S. and STEINBERG, F. (coords.) (2009). *La reforma de la arquitectura financiera internacional.* Madrid, AFI-ICEI-ICO-Real Instituto Elcano.

BANCO DE ESPAÑA (2010). “3. The external environment of the euro area”, *Annual Report 2009*. Banco de España, Madrid.

BEAN, C. (2009). *The great moderation, the great panic, and the great contraction*. Schumpeter Lecture at the Annual congress of the European Economic Association, Barcelona, August 25.

BERGANZA, J. C. and BROTO, C. (2011). *Flexible inflation targets, forex interventions and exchange rate volatility in emerging countries*. Banco de España, Documento de Trabajo No. 1105.

BERNANKE, B. S. (2005). *The Global Saving Glut and the US Current Account Deficit*. Speech delivered at the Sandridge Lecture, Virginia Association of Economists, Richmond, Va., March 10.

— (2010). *Monetary policy and the housing bubble*. Speech delivered at the annual meeting of the American Economic Association. Atlanta, Georgia, January 3.

BINI SMAGHI, L. (2004). “A Single EU Seat in the IMF”. *Journal of Common Market Studies*, Volume 42, Number 2, p. 229-248.

— (2010). *Reserve accumulation: the other side of the coin*. Speech at the 5th High-level EMEAP-Eurosystem Seminar, Sydney, February 10.

BIS (2009). *BIS 79th Annual Report 2008/09*. BIS, June.

— (2010). *The Functioning and Resilience of cross-border funding markets*. CGFS Paper No. 37, March.

BLANCHARD, O. and GALÍ, J. (2008). *Labor Markets and Monetary Policy: A New-Keynesian Model with Unemployment*. NBER Working Paper No. 13897, March.

BLANCHARD, O. and MILESI-FERRETTI, G. M. (2009). *Global Imbalances: In Midstream?* IMF Staff Position Note, SPN/09/29, December 22.

BOUGHTON, J. M. (2001). *Silent Revolution. The International Monetary Fund 1979-1989*. IMF, Washington, DC.

— (2004). *The IMF and the Force of History: Ten Events and Ten Ideas That Have Shaped the Institution*. IMF working paper, WP/04/75, May.

— (2011). *The Flight of the Dodo: Is there a Future For the SDR?* ICRIER Conference, Delhi, September 13.

BRADFORD, C. (2009). *The future of the IMF*. The Brookings Institution, mimeo, April.

BROTO, C., ERCE, A. and DIAZ-CASSOU, J. (2011). “Measuring and explaining the volatility of capital flows to emerging countries”. *Journal of Banking & Finance*, Article in Press, Corrected Proof, January.

BUSTELO, P. (2000). “La construcción de una nueva arquitectura financiera internacional: progresos y propuestas”. *Boletín Económico de Información Comercial Española*, No. 2642, 31 de enero a 13 de febrero de 2000, p. 25-33.

CABALLERO, R., FAHRI, E. and GOURINCHAS, P. (2008). “An Equilibrium Model of “Global Imbalances” and Low Interest Rates”. *The American Economic Review*, Volume 98, No. 1, March, p. 358-393.

CALVO, G. (2009). “Lender of Last Resort: Put It on the Agenda!”. *VoxEU.org Lead Commentary*, Debate on Development and the crisis, March 23.

CAMDESSUS, M. (1998). *Toward a New Financial Architecture for a Globalized World*. Address at the Royal Institute of International Affairs, London, May 8.

CAMDESSUS, M. et al. (2011). *Reform of the International Monetary System. A cooperative approach for the 21st Century*. Palais-Royal Initiative, a group convened by Michel Camdessus, Alexandre Lamfalussy, and Tommaso Padoa-Schioppa, January, 18.

CARBÓ, S. (2009). “Crisis y regulación financiera: lecciones de la evidencia empírica y mecanismos de acción”, in *Crisis y Regulación Financiera, Papeles de economía española,* FUNCAS, No. 122, p. 12-25.

CARRASCO, C., MOLINA, L., and ORGAZ, L. (2011). “The repositioning of the large emerging economies in the world economy”. *Economic Bulletin,* Banco de España, January.

CARSTENS, A. (2004). *Improving the Policy Response to Financial Crisis*. Address at the Bank of Spain and IMF International Conference on Dollars, Debt, and Deficits–60 Years After Bretton Woods, Madrid, June 14.

CARUANA, J. (2010). *Financial Stability: Ten Questions and about Seven Answers*. Reserve Bank of Australia 50th Anniversary Symposium, February 9.

CASARES, J. (2002). *El pensamiento en la política económica*. Esic Editorial, Madrid.

— (2007). “Elaboración de la política comercial. Un marco artístico”. *Distribución y Consumo*, January-February.

CASAS, M. DE LAS y SERRA, X. (2008). *Simplification of IMF Lending: Why not just one flexible credit facility?* Banco de España, Documento Ocasional No. 0806.

CASAS, M. DE LAS, FERNÁNDEZ DE LIS, S., GONZÁLEZ-MOTA, E., MIRA, C. (2004). *Review of the progress in the reform of the international financial architecture since the Asian crisis.* Banco de España, Documento Ocasional, No. 0407.

CATTE, COVA, PAGANO, and VISCO (2010), *The Role of Macroeconomic Policies in the Global Financial Crisis*, Banca d'Italia, Occasional Paper No. 69.

CEÑA, C. and HERNÁNDEZ, L. (1995). "El FMI; cincuenta años de cooperación". *Información Comercial Española, Boletín ICE*, No. 2459, p. 29-36, June.

CONTHE, M. (2007). *La paradoja del bronce: Espejismos y sorpresas en el mundo de la economía y la política.* Editorial Crítica, Barcelona.

CRAINE, R. and MARTIN, V. (2009). "Interest Rate Conundrum". *The B.E. Journal of Macroeconomics* Vol. 9, Issue 1.

DE VRIES, M. G. (1986). *The IMF in a Changing World*, *1945-85.* International Monetary Fund, Washington D.C.

DEHESA, G. DE LA (2009). "Once fallos de mercado y de Estado en la crisis financiera", in *Crisis y Regulación Financiera. Papeles de economía española,* FUNCAS, No. 122, p. 26-37.

— (2009a). *La primera gran crisis financiera del siglo XXI: orígenes, detonante, efectos, respuestas y remedios*. Alianza Editorial, Madrid.

DELGADO, M., ORTIZ, E. and MARTÍNEZ ROLLAND, M. A. (2005). "La sostenibilidad de la deuda en los países de bajos ingresos. Iniciativas multilaterales frente al problema del sobreendeudamiento" in *60 Aniversario de las Instituciones de Bretton Woods. Información Comercial Española*, ICE No. 827, December, p. 153-170.

DÍAZ-CASSOU, J., FERNÁNDEZ, M. J., and FERNÁNDEZ DE LIS S. (2006). "IMF financial facilities: signalling versus insurance". Banco de España, *Economic Bulletin,* April.

DOOLEY, M., FOLKERTS-LANDAU, P., and GARBER, P. (2003). *An Essay on the Revived Bretton Woods System*. National Bureau of Economic Research Working Paper 9971, September.

DORRUCCI, E., and MCKAY, J. (2011). *The International Monetary System after the Financial Crisis*. European Central Bank Occasional Paper Series No. 123, February.

DREHER, A. (2004). "Does the IMF cause moral hazard? A critical review of the evidence". *EconWPA International Finance*, December 2004.

EICHENGREEN, B. (2009). "The Dollar Dilemma: The World's Top Currency Faces Competition". *Foreign Affairs,* September/October.

— (2010). *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System.* Oxford University Press, EEUU.

DÍAZ-CASSOU, J., and Erce, A. (2010). *Creditor discrimination during sovereign debt restructurings*. Banco de España, Documento de Trabajo No. 1207.

ESTRADA, A. (2012). "Nuevas herramientas para la gobernanza económica global: Marco para el crecimiento y supervisión de desequilibrios". Banco de España, *Boletín Económico*, September.

ESTRADA, A., JIMENO, J. F. and MALO DE MOLINA, J. L. (2009). *The Spanish economy in EMU: The first ten years.* Banco de España, Documento Ocasional No. 0901.

ERCE, A. and DIAZ-CASSOU, J. (2010). "IMF Interventions in Sovereign Debt Restructurings" in *Sovereign Debt: From Safety to Default*. R. Kolb, J. Wiley & Sons (eds.), forthcoming.

ERCE, A., DIAZ-CASSOU, J. and VAZQUEZ, J. (2008). *The Role of the IMF in Recent Sovereign Debt Restructurings: Implications for the Policy of Lending Into Arrears.* Banco de España, Documento Ocasional No. 0805.

FERNÁNDEZ, M. J., and MORENO, P. (2005). "Retos de la política de desarrollo del Banco Mundial y del FMI", in *60 Aniversario de las Instituciones de Bretton Woods. Información Comercial Española*, ICE No. 827, December, p. 171-179.

FERNÁNDEZ, R. and ESTELLA, A. (2011). *Nuevas Ideas para la Regulación del Sistema Financiero Internacional: propuesta de reforma en el marco G20*. Fundación Ideas, Documento de Debate, 1.

FERNÁNDEZ ORDÓÑEZ, M. (2010). *Opening remaks*. V High Level Seminar of the Eurosystem and Latin American Central banks: Global Rebalancing, Asset Prices and Policy Responses, Banco de España, Madrid, 10 December.

FEYERABEND, P.K. (1975). *Against method: outline of an anarchistic theory of knowledge*. Verso, London.

FIELD, L. and MORENO, P. (2010). "El G20 y la vigilancia financiera global", in *Crisis Financiera y Arquitectura Financiera Internacional*. *Información Comercial Española, Revista de Economía,* No. 855, p.113-122, July-August.

FIELD, L. and PÉREZ, D. (2009). "El Informe del Grupo de Alto Nivel sobre Supervisión Financiera en la UE: El Informe Larosière". Banco de España, *Estabilidad Financiera* No. 16, May.

FISHER, S. (1987). *International Macroeconomic Policy Coordination*. National Bureau of Economic Research, NBER Working Paper No. W2244, May.

— (2003). "Globalization and Its Challenges". *American Economic Review*, Vol. 93, May, p. 1-30.

— (1999). *On the Need for an International Lender of Last Resort*. Paper presented at the joint luncheon of the American Economic Association and the American Finance Association New York, January 3.

FMI (2001). "Organización y operaciones financieras del FMI". *Serie de folletos FMI*, No. 45 Sexta edición.

— (1993). *Convenio Constitutivo del Fondo Monetario Internacional*. Fondo Monetario Internacional, Washington D.C.

FRIEDMAN, B. J. (2007). «What We Still Don't Know about Monetary and Fiscal Policy». *Brookings Papers on Economic Activity, Economic Studies Program,* The Brookings Institution, vol. 38(2), p. 49-74.

G20 (2008). *Declaration – Washington, USA*. G20, Washington, November 15.

— (2009). *Leaders' statement, the Pittsburgh Summit*. G20, Pittsburgh, September 25.

— (2009a). *Leaders Statement – The Global Plan for Recovery and Reform*. G20, London, April 2.

— (2009b). *Declaration on strengthening the financial system.* G20, London, April 2.

— (2010). *Communiqué – Gyeongju, ROK*. G20, Gyeongju, October 23.

— (2010a). *The G20 Toronto Summit Declaration*. G20, Toronto, June 26-27.

— (2010b). *The G20 Seoul Summit Declaration*. G20, Seoul, November 11-12.

GARCÍA ANDRÉS, G. (2011). "Apuntes para una teoría post-crisis de la intervención pública en el sistema financiero", in *Crisis y Regulacion Financiera*. *Papeles de economía española,* FUNCAS, No. 122, p. 180-192.

GARRIDO, I., MORENO, P. and SERRA, X. (2012). *El FMI y los acuerdos regionales de financiación*. (mimeo)

GIANVITI et al. (2010). *Convenio Constitutivo del Fondo Monetario Internacional*. Bruegel Blueprint, November 9.

GOLA, C. and SPADAFORA, F. (2009). *Financial Sector Surveillance and the IMF*. IMF Working paper, WP/09/247.

GOLDSTEIN, M. and VERON N. (2011). *Too Big to Fail: The Transatlantic Debate*. Working paper 11-2, Peterson Institute for International Economics, January.

GONZÁLEZ-MOTA, E. and MARQUÉS, J. M (2010). "Dodd-Frank Wall Street Reform: un cambio profundo en el sistema financiero de Estados Unidos". Banco de España, *Estabilidad Financiera* No. 19, November.

GONZÁLEZ-PÁRAMO, J. M. (2009). "La dinámica de las tensiones financieras: causas y consecuencias", in *Crisis y Regulación Financiera. Papeles de economía española,* FUNCAS, No. 122, p. 2-11.

GRANELL, J. J. (2010). "La reforma de la Arquitectura Financiera Internacional en su perspectiva histórica" in *Crisis Financiera y Arquitectura Financiera Internacional*. *Información Comercial Española*, *Revista de Economía*, No. 855, p. 123-136, July-August.

GUIDOTTI, P., STURZENEGGER, F. and VILLAR A. (2004). "On the Consequences of Sudden Stops". Economia Vol. 4, No. 2, Spring 2004, p. 171-214.

GUITIÁN, M. (1992). "La singular naturaleza de las funciones del Fondo Monetario Internacional". *FMI, Serie de folletos*, No. 46-s.

GUZMAN, R. (2010). "El papel del FMI en la arquitectura financiera internacional; la reforma de su mandato", in *Crisis financiera y arquitectura financiera internacional. Información Comercial Española, ICE: Revista de economía*, No. 855, p. 9-25.

HERNANDO I., LLOPIS J., VALLÉS J. (2012). *Los retos para la política económica en un entorno de tipos de interés próximos a cero*. Banco de España, Documentos Ocasionales, No. 1207.

HINOJO, P. and MARTÍNEZ-ROLLAND, M. A. (2010). "La supervisión de tipos de cambio del Fondo Monetario Internacional" in *Crisis financiera y arquitectura financiera internacional. Información Comercial Española, ICE: Revista de economía,* No. 855, p. 69-81.

HORSEFIELD, J. K. (1969). *The International Monetary Fund, 1945-1965–Twenty Years of International Monetary Cooperation*. IMF, Washington DC.

HUDSON, M. (2003). *Super imperialism: the origin and fundamentals of US world dominance.* London, Pluto press.

IEG (2011). *The World Bank Group's Response to the Global Economic Crisis–Phase II.* Washington, DC: Independent Evaluation Group, the World Bank Group.

IEO (2002). Evaluation of Prolonged Use of IMF Resources". *IEO Evaluation Report*, September 25.

— (2003). "IMF and Recent Capital Account Crises: Indonesia, Korea, Brazil". *IEO Evaluation Report*, July 28.

— (2004). "Report on the Evaluation of Poverty Reduction Strategy Papers (PRSPs) and The Poverty Reduction and Growth Facility (PRGF)". *IEO Evaluation Report*, July 6.

— (2006). "An Evaluation of the IMF's Multilateral Surveillance". *IEO Evaluation Report*, April 7.

— (2008). "Structural Conditionality in IMF-Supported Programs". *IEO Evaluation Report*, January 3.

— (2010). "IMF Interactions with Member Countries". *IEO Evaluation Report*, January 20.

— (2011). "Evaluation of IMF Performance in the Run-Up to the Financial and Economic Crisis–Multilateral Surveillance". *IEO Evaluation Report*, January 10.

IMF (1998). "The IMF and the Poor". *IMF, Fiscal Affairs Department Pamphlet Series* No. 52.

— (1999). "Review of the Compensatory and Contingency Financing Facility (CCFF) and Buffer Stock Financing Facility (BSFF)–Preliminary Considerations". *IMF Policy paper*, December 9.

— (2000). "Review of Fund Facilities–Preliminary Considerations". *IMF Policy paper*, March 2.

— (2000a). "Report to the IMF Executive Board of the Quota Formula Review Group". *IMF Experts report*, April 28.

— (2001). "Financial Organization and Operations of the IMF". *IMF Pamphlet series*, Washington DC.

— (2002). *IMF Glossary: English-French-Spanish*. IMF, Washington DC.

— (2002a). "Access Policy in Capital Account Crises". *IMF Policy paper*, July 29.

— (2002b). "Guidelines on Conditionality". *IMF Policy paper*, September 25, 2002

— (2003). "Review of Access Policy Under the Credit Tranches and the Extended Fund Facility". *IMF Policy paper*, January 14.

— (2004). "Review of the Compensatory Financing Facility". *IMF Policy paper*, February 18.

— (2004a). "The IMF's Contingent Credit Lines (CCL)". *IMF Factsheet*, March.

— (2004b). "Review of Exceptional Access Policy". *IMF Policy paper*, March 23.

— (2004c). "Signaling by the Fund-A Historical Review". *IMF Policy paper*, July 16.

— (2006). "Quotas–Further Thoughts on a New Quota Formula, and Statistical Appendices I and II". *IMF Policy paper*, November 22.

— (2007). "Staff Report on the Multilateral Consultation on Global Imbalances with China, the Euro Area, Japan, Saudi Arabia, and the United States". *IMF Policy paper*, June 29.

— (2007). "Quotas–Updated Calculations and Data Adjustments", *IMF Policy paper*, July 11,

— (2008). "Reform of Quota and Voice in the International Monetary Fund-Draft Report of the Executive Board to the Board of Governors", *IMF Policy paper*, March 28,

— (2008a). "Review of Limits on Access to Financing in the Credit Tranches and Under the Extended Fund Facility, and Overall Access Limits Under the General Resources Account". *IMF Policy paper*, April 17

— (2008b). "Operational Guidance to IMF staff on the 2002 Conditionality Guidelines". *IMF Policy note*, July 10.

— (2008c). "Review of Limits on Access to Financing in the Credit Tranches and Under the Extended Fund Facility, and Overall Access Limits Under the General Resources Account". *IMF Policy paper*, September 2.

— (2009). *Global Financial Stability Report*. IMF, October.

— (2009a). "Review of Fund Facilities–Analytical Basis for Fund Lending and Reform Options". *IMF Policy paper*, February 6.

— (2009b). "Update on the Financing of the Fund's Concessional Assistance and Debt Relief to Low-Income Member Countries". *IMF Policy paper*, April 17

— (2009c). "Review of the Adequacy of and Options for Supplementing Fund Resources". *IMF Policy paper*, January 12.

— (2009d). "Qualifiers Used in Summings Up of Executive Board Meetings". *IMF News,* September 24, 2009

— (2009e). "GRA Lending Toolkit and Conditionality: Reform Proposals". *IMF Policy paper*, March 13

— (2009f). "Borrowing by the Fund-Operational Issues". *IMF Policy paper*, June 17.

IMF (2010). “Reserve Accumulation and International Monetary Stability”. *IMF Policy paper*, April 13.

— (2010a). “Central Banking Lessons from the Crisis”. *IMF Policy paper*, May 27.

— (2010b). “Financial Sector Surveillance and the Mandate of the Fund”. *IMF Policy paper*, March 19.

— (2010c). “Modernizing the Surveillance Mandate and Modalities”. *IMF Policy paper* und, March 26.

— (2010d). “IMF Standing Borrowing Arrangements”. *IMF Factsheet*, September 29.

— (2010e). “Update on the Financing of the Fund’s Concessional Assistance and Debt Relief to Low-Income Member Countries. *IMF Policy paper,* September 20.

— (2010f). “The Fund’s Mandate-Future Financing Role”. *IMF Policy paper*, March 25.

— (2010g). “Regional Financial Safety Nets to Create Stronger Links”. *IMF Survey Magazine: Policy*, October 26.

— (2010h). “Exiting from Monetary Crisis Intervention Measures–Background Paper”. *IMF Policy paper*, January 25.

— (2010i). “Strategies for Fiscal Consolidation in the Post-Crisis World”. *IMF Policy paper*, February 4.

— (2010j). “Central Banking Lessons from the Crisis”. *IMF Policy paper*, May 27.

— (2010k). “Fourteenth General Review of Quotas-Realigning Quota Shares-Further Considerations”. *IMF Policy paper*, June 22.

— (2010l). “IMF Conditionality”. *IMF Factsheet*, September 27.

— (2010m).”The Fund’s Mandate–The Future Financing Role: Revised Reform Proposals*”. IMF Policy paper*, August 25.

— (2010n). “The Fund’s Mandate–The Future Financing Role: Reform Proposals”. *IMF Policy paper*, June 29.

— (2010ñ). “Implementation Plan in Response to Board-Endorsed Recommendations Arising from the IEO Evaluation of IMF Interactions with Member Countries”. *IMF Policy paper*, May 27.

— (2010o). “IMF Quota and Governance Reform–Elements of an Agreement”. *IMF Policy paper*, October 31.

— (2010p). “Fourteenth General Review of Quotas–Possible Elements of a Compromise, Additional Simulations, and The Chairman’s Concluding Remarks”. *IMF Policy paper*, October 5.

— (2011). “The Rollback of Credit Arrangements in the New Arrangements to Borrow (NAB)”. *IMF Policy paper,* December 15.

— (2011a). “Recent Experiences in Managing Capital Inflows: Cross-Cutting Themes and Possible Guidelines”. *IMF Policy paper*, February 15.

— (2011b). “Enhancing International Monetary Stability–A Greater Role for the SDR?”. *IMF Policy paper*, January 7.

— (2011c). “IMF Executive Board Concludes the Meeting on Enhancing International Monetary Stability–A Role for the SDR?”. *IMF Public Information Notice* (PIN) No. 11/22, February 10.

— (2011d). “Crisis Management and Resolution Policies-Preliminary Lessons from the Global Financial Crisis”. *IMF Policy paper*, February 9.

— (2011e). “Review of the Flexible Credit Line and Precautionary Credit Line”. *IMF Policy paper,* November 1.

— (2011f). “Analytics of Systemic Crises and the Role of Global Financial Safety Nets”. *IMF Policy paper*, June 1.

— (2012). “The Liberalization and Management of Capital Flows: an institutional View”. *IMF Policy Paper.*

IMFC (2010). “Comunicado de la vigésima segunda reunión del Comité Monetario y Financiero Internacional de la Junta de Gobernadores del Fondo Monetario Internacional”. IMFC, Washington, October 9.

IMF-FSB (2009). “The Financial Crisis and Information Gaps, Report to the G20 Finance Ministers and Central Bank Governors”. *IMF, FSB Report*, October 29.

IMF-G20 (2010). “Appendix 1 Fiscal Costs of the Recent Crisis” en A fair and Substantial Contribution by the Financial Sector: Final Report for the G20”. *IMF G20 Report*, June.

IMF-WORLD BANK (2009). “Financial Sector Assessment Program After Ten Years–Experience and Reforms for the Next Decade”. *IMF-World Bank Policy paper*, August 28.

IRC-TFIMF (2010). “Strengthening the international monetary system: Reserves”. *Report prepared by the Task Force on IMF issues of the International Relations Committee of the European System of Central Banks,* September (mimeo).

— (2011). “Connecting the IMF and regional financing arrangements. Special focus on the European experience”. *Report prepared by the Task Force on IMF issues of the International Relations Committee of the European System of Central Banks,* June (mimeo).

IMF (2013). “The size and composition of IMF resources”. IRC, *Report prepared by the Task Force on IMF issues,* September. *(nonpaper)*

ISSING, O. (2003). “Monetary and Financial Stability: Is there a Trade-off?”. Conference on *Monetary Stability, Financial Stability and the Business Cycle,* Bank for International Settlements, March 28-29.

JEANNE, O. and ZETTELMEYER, J. (2004). “The Mussa Theorem (and other results on IMF induced moral hazard)”. *IMF working paper* WP/04/192, October.

JOHNSON, S. (2008). “Shadow Agenda for the G20 Summit: More Money for the IMF”. *The Peterson Institute for International Economics, Real Time Economic Issues Watch*: Global Financial Crisis, November 6.

KENEN, P. (1989). “The use of IMF credit” en Gwin, C. Feinberg, R. et al., *The International monetary fund in a multipolar world: pulling together*. New Brunswick, Transaction Books.

KEYNES, J. M. (1936). The General Theory of Employment, Interest and Money. Macmillan, London.

KRUEGER, A. (2002). *A New Approach To Sovereign Debt Restructuring*. International Monetary Fund, Washington DC, April.

L´HOTELLERIE-FALLOIS, P. (2011). Comentarios a «An evaluation of IMF surveillance of the euro area» de Pissani-Ferry J., Sapir A. and Wolff, G. Conferencia Fedea, November 4.

LAEVEN, L. and VALENCIA, F. (2010). “Resolution of Banking Crises: The Good, the Bad, and the Ugly”. *IMF Working Paper*, WP/10/146.

LÓPEZ ROA, A. L. (2007). *Globalización y Economía*. Lección inaugural del curso académico 2007-2008 de la Universidad Pontificia Comillas, 3 de octubre.

MACK, A. (2009). *A New International Economic Order? The IMF & the GFC*. Paper for the 2009 APSA Conference.

MALLABY, S. (2008). “Supersize the IMF”. *Washington Post* Thursday, November 13.

MALO DE MOLINA, J. L. (2011). “La crisis y las insuficiencias de la arquitectura institucional de la moneda única” in *Euro y Crisis Económica. Información Comercial Española, Revista de Economía*, No. 863, p. 21-34, November-December.

MARTÍ, L. (2011). *Reconstruyendo la eurozona: el papel de Alemania*. Análisis del Real Instituto Elcano, ARI 37/2011, February 16.
MARTÍNEZ, M. (2008). "La reforma de voz y representación en el FMI y su efecto sobre la cuota de España". Banco de España, *Boletín Económico*, September.
MARTINEZ-DIAZ, L. (2008). *Executive Boards in International Organizations: Lessons for Strengthening IMF Governance*. IEO, Background Paper number: BP/08/08.
MARTÍNEZ ROLLAND, M. A. (coord.) (2010). *Crisis Financiera y Arquitectura Financiera Internacional.* Información Comercial Española, Revista de Economía, No. 855, July-August.
MATEOS y LAGO, I.; Duttagupta, R. and Goyal, R. (2009). "The Debate on the International Monetary System". *IMF Staff Position Note*, SPN/09/26, November 11.
MOMANI, B. (2007). "Another Seat at the Board: Russia's IMF Executive Director". *International Journal*, Fall.
MOMANI, B. (2008). *Getting a Seat at the IMF Executive Board Table*. Paper presented to the ISA Annual Conference, San Francisco, March.
MONNET, J. (1976). *Mémoires*. Librairie Arthème Fayard, Paris.
MORENO, P. (2009). "El G20 y la reforma de la Arquitectura Financiera Internacional". Banco de España*, Boletín Económico*, July-August.
MORENO, P. (2010). *Dos años de Cumbres del G20: adagio spiccato*. Análisis del Real Instituto Elcano, ARI 162, November, 15.
MUNS, J. (2008). *Un economista español en la arena internacional*. Banco de España, Discurso de aceptación del Premio Rey Juan Carlos de Economía.
NIELSEN, L. (2011). *Classifications of Countries Based on Their Level of Development: How it is Done and How it Could be Done*. IMF Working Paper No. 11/31.
OBSTFELD, M., SHAMBAUGH, J. and TAYLOR. A. (2008). *Financial Stability, the Trilemma, and International Reserves*. National Bureau of Economic Research Working Paper 14217, August.
OMC (2010). "Revista General de la Evolución del Entorno Comercial Internacional". *Documento OMC*: WT/TPR/OV/13, November 24.
ORTEGA, E. and PEÑALOSA, J. (2012). *The Spanish economy in EMU: the first ten years*. Banco de España, Documento Ocasional, No. 1201.
RAJAN, R. (2005). *Has financial development made the World riskier?,* National Bureau of Economic Research, NBER Working Paper 11728, November.
— (2013). "A step in the dark: unconventional monetary policy after the crisis". Andrew Crockett Memorial Lecture, The University of Chicago Booth School of Business, Basel, June 23.
RATO, R. DE (2006). *Progress in Implementing the Fund's Medium-Term Strategy*. Speech At the Foreign Correspondents' Club, Tokyo, August 3.
— (2006a). *The IMF in Asia and the World Economy*. Speech At the Economic Society of Singapore, May 24.
REINHART, C. and ROGOFF, K. (2008). *This Time is Different: A Panoramic View of Eight Centuries of Financial Crises*. National Bureau of Economic Research, Working Paper No. 13882.
— (2009). *This Time is Different: Eight Centuries of Financial Folly*. Princeton University Press, Princeton (New Jersey).
— (2010). *From Financial Crash to Debt Crisis*. National Bureau of Economic Research, Working Paper No. 15795.
— (2010b). Growth in a Time of Debt. National Bureau of Economic Research, Working Paper No. 15639.
REPULLO, R. (2009). *Comments to "Regulatory Reform: Integrating Paradigms*", by Augusto de la Torre and Alain Ize. World Bank and Banco de España Conference on Reforming Financial Regulation and Supervision, Madrid, June 2009.
RODRIK, D. (2006). "The Social Cost of Foreign Exchange Reserves". *International Economic Journal* 20, 3: 253-266.
ROLDÁN, J. M. (2011). "La respuesta regulatoria a la crisis financiera global" *in Euro y Crisis Económica. Información Comercial Española, Revista de Economía,* No. 863*,* p. 62-72, November-Deceember.
RUBIN, R. (1998). "Strengthening The Architecture of the International Financial System". Address at the Brookings Institution., Washington DC, April 14.
SAMUELSON, P. (1994). "World at the Turn of the Century". Economic & Financial Review, a Journal of the European Economic and Financial Centre, p- 165-200, winter.
SAURINA, J. (2009). "Reflexiones sobre la regulación bancaria a raíz de la crisis financiera internacional" en Crisis y Regulacion Financiera. *Papeles de economía española, FUNCAS, nº* 122, p. 193-205.
SERRA, X. (2003). "Estado actual de la condicionalidad del FMI". Banco de España, *Boletín Económico*, July-August.
SERRANO, M. and SOLER, A. (2005). "Aseguramiento y señalización en los programas del FMI" in *60 Aniversario de las Instituciones de Bretton Woods. Información Comercial Española*, ICE, No. 827, December, p. 45-71.
SETSER, B (2008). "The Political Economy of the SDRM". *IPD Task Force on Sovereign Debt*, January 3.
SKY NEWS (2009). "PM: G20 Pledge $1 Trillion For Economy". Sky News, April 2.
SMITH, J (1984). "The Politics of IMF Lending". *Cato Journal*, vol, 4, No. 1, Spring/Summer.
SOLBES, P. and WESTENDROP, C. (2010). "El G20 no es la ONU". *Tribuna El País*, November 10.
SOLOMON, R. (1984). "A Comment on The Politics of IMF Lending (by Smith, J. 1984)". *Cato Journal,* vol, 4, No. 1, Spring/Summer 1984.
STEINBERG, F. (2009). "Legitimidad y representatividad del Fondo Monetario Internacional" in Alonso, J. A., Fernández de Lis, S. and Steinberg, F. (coords.): *La reforma de la arquitectura financiera internacional*. Madrid, AFI-ICEI-ICO-Real Instituto Elcano, p. 53-70.
STEINBERG, F. (2010). *Guerra de divisas: entre la política interna y la cooperación internacional*. Análisis del Real Instituto Elcano, ARI 154, October 26.
STIGLITZ, J. (2002). *Globalisation and its discontents*. W.W. Norton & Co, New York.
STRAUSS-KAHN, D. (2008). "*The IMF and Its Future*. Speech at the Banco de España, Madrid, December 15.
SUBACCHI, P. and PICKFORD, S. (2011). *Legitimacy vs Effectiveness for the G20: A Dynamic Approach to Global Economic Governance*. Chatam House Briefing Paper, October.
TAYLOR, J. B. (1993). «Discretion versus Policy Rules in Practice». *Carnegie-Rochester Conference Series on Public Policy*, 39, p.195-214.

TAYLOR, J. B. (2007). *Housing and monetary policy*. National Bureau of Economic Research, Working Paper No. 13682.

TORIBIO, J. J. (2010). "La encrucijada del Sistema monetario Internacional: algunas reflexiones" in *Crisis Financiera y Arquitectura Financiera Internacional. Información Comercial Española*, *Revista de Economía*, No. 855, p. 43-55, July-August.

VALLE, E. (2005). "La negociación de la deuda internacional: efectos de la política de Lending into Arrears". *Información Comercial Española, ICE: Revista de economía,* No. 827, p. 73-82.

VARELA, M. (1969). *El Fondo Monetario Internacional*. Publicaciones Guadiana. Madrid

— (coord.) (1994). *El Fondo Monetario Internacional, El Banco Mundial y la Economía Española*. Ediciones Pirámide, Madrid.

— (1996). "Medio siglo de cooperación económica internacional", in 50 aniversario de la *Facultad de Ciencias Económicas y Empresariales*. Editora Mundial. Madrid.

VARELA M. and VARELA, F. (2000). "Las instituciones financieras internacionales en el umbral del siglo XXI" en *El FMI ante el siglo XXI*. *Perspectivas del Sistema Financiero*. Nº 68, p. 1-33, January.

— (2008). "La actual crisis financiera y los hedge funds". *Revista de economía mundial*, No. 18, p. 169-182.

VEGARA, D. (2010). "La crisis y la política económica: cinco lecciones", in *La crisis de 2008. De la economía a la política y más allá, Mediterráneo económico,* No. 18, p. 65-76.

VIÑALS, et al. (2010). *Shaping the New Financial System. IMF* Staff Position Note, October 3.

VREELAND, J. R. (2003). *The IMF and Economic Development.* Cambridge: Cambridge University Press.

— (2004). "The International and Domestic Politics of IMF Programs". Reinventing Bretton Woods Committee and World Economic Forum conference on The Fund's Role in Emerging Markets: Reassessing the Adequacy of its Resources and Lending Facilities. Amsterdam, November 18-19.

WEBSTER (1996). *Webster's New Universal Unabridged Dictionary.*

WILLIAMSON, J. (1990). "What Washington Means by Policy Reform" en Williamson, J. (ed.): *Latin American Readjustment: How Much has Happened*. *Institute for International Economics*, Washington, April.

— (2004). "The strange history of the Washington consensus". *Journal of post Keynesian economics*, Vol. 27, No. 2, 2004, p. 195-206.

WOODS, N. and LOMBARDI, D. (2006). "Uneven Patterns of Governance: How Developing Countries Are Represented in the IMF". *Review of International Political Economy*, vol. 13 (3), August.

WSJ (2011). "Mexico To Continue Accumulating Foreign Reserves–Carstens". *Wall Street Journal*, January 7.

XIAOCHUAN, Z. (2009). "Reform the International Monetary System, Essay by Dr Zhou Xiaochuan, Governor of the People's Bank of China". *BIS Review* No. 41, March 23.

ZOELLICK, R. (2010)."The G20 must look beyond Bretton Woods II". *Financial Times Opinion*, November 7.

LIST OF FIGURES

ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BRIC	Brazil, Russia, India y China
BSFF	Buffer Stock Financial Facility
CCFF	Compensatory and Contingency Financing Facility
CCL	Contingent Credit Lines
CDS	Credit Default Swaps
CFF	Compensatory Financing Facility
CGFS	Committee in the Global Financial System
CMI	Chiang Mai Initiative
CMIM	Chiang Mai Initiative Multilateralisation
CSF	Currency Stabilization Funds
DDSR	Debt and Debt Service Reduction
ECB	European Central Bank
ECOFIN	Economic and Financial Affairs Council
EFF	Extended Fund Facility
EFM	Emergency Financing Mechanism
EFSF	European Financial Stability Fund
EMBI	Emerging Markets Bond Index
ENDA	Emergency Natural Disaster Assistance
EPCA	Emergency Post-Conflict Assistance
ESAF	Enhanced Structural Adjustment Facility
ESF	Exogenous Shocks Facility
ESM	European Stabilization Mechanism
ESRB	European Systemic Risk Board
EURIMF	Group of European Representatives before the IMF
EWE	Early Warning Exercise
FAR	Fondo Andino de Reservas
FATF	Financial Action Task Force
FCL	Flexible Credit Line
FED	Federal Reserve System
FLAR	Fondo Latinoamericano de Reservas
FSA	Financial Stability Assessment
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
FSN	Financial Safety Nets
FTP	Financial Transactions Plan
G20	Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, the Republic of South Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, United Kingdom, United States, and the European Union
G7	Canada, France, Germany, Italy, Japan, United Kingdom, and United States.
GAB	General Arrangements to Borrow
GFSN	Global Financial Safety Nets
GFSR	Global Financial Stability Report
GRA	General Resources Account
GSE	Government Sponsored Enterprises

GSM	Global Stabilization Mechanism
HAPA	High Access Precautionary Arrangements
HIPC	Highly Indebted Poor Countries
IEO	Independent Evaluation Office
IFIs	International Financial Institutions
IMF	International Monetary Fund
IMFC	International Monetary and Financial Committee
IMS	Internacional Monetary System
LIA	Lending into Arrears
MAP	Mutual Assessment Process
MBS	Mortgage-backed Securities
MCM	Monetary and Capital Markets Department
MDRI	Multilateral Debt Relief Initiative
NAB	New Arrangements to Borrow
NIEO	New International Economic Order
NIFA	New International Financial Arquitecture
OECD	Organization for Economic Co-operation and Development
PLL	Precautionary and Liquidity Line
PRGF	Poverty Reduction and Growth Facility
PRGT	Poverty Reduction and Growth Trust
RCF	Rapid Credit Facility
RFI	Rapid Financing Instrument
SAF	Structural Adjustment Facility
SBA	Stand By Arrangement
SCF	Stand By Credit Facility
SDR	Special Drawing Rights
SDRM	Sovereign Debt Restructuring Mechanism
SFF	Supplementary Financial Facility
SIFI	Systemically Important Financial Institutions
SIV	Structured Investment Vehicle
SLF	Short term Liquidity Facility
SPR	Strategy, Policy, and Review Department
SRF	Supplemental Reserve Facility
STF	Systemic Transformation Facility
TARP	Troubled Assets Relief Program
UK:	The United Kingdom
US:	The United States
WEO	World Economic Outlook
WTO	World Trade Organization
bn	billion (10^9)
tn	trillion (10^{12})

INDEX

PUBLICACIONES DE LA SERIE «ESTUDIOS ECONÓMICOS», DEL BANCO DE ESPAÑA[1]

1 JULIO RODRÍGUEZ LÓPEZ: Una estimación del producto interior bruto trimestral de España, 1958-1971 (1972) (Publicadas nuevas versiones en Documentos de Trabajo núms. 8211 y 8301.)
2 VICENTE POVEDA ANADÓN Y PEDRO MARTÍNEZ MÉNDEZ: El empleo de tasas de variación como indicadores cíclicos (1973)*.
3 IGNACIO GARRIDO SÁNCHEZ: El rendimiento interno de las obligaciones, 1960-1973 (1974)*.
4 FRANCISCO MARTÍN BOURGÓN: Rendimiento de una cartera de valores en España en el período, 1961-1972 (1974)*.
5 JOSÉ MANUEL OLARRA JIMÉNEZ: Medidas de política monetaria adoptadas en el período 1957-1973 (1974) (2.ª edición: 1976).
6 JOSÉ PÉREZ FERNÁNDEZ: Un modelo para el sector financiero de la economía española (1975)*.
7 JULIO RODRÍGUEZ LÓPEZ: Las encuestas coyunturales, su empleo en España (1975).
8 ANA SÁNCHEZ TRUJILLO: Relaciones econométricas sobre precios y salarios en la economía española (1977).
9 JOSÉ PÉREZ FERNÁNDEZ: El tipo de rendimiento de las obligaciones y la demanda de depósitos (1977).
10 LUIS ÁNGEL ROJO Y JOSÉ PÉREZ FERNÁNDEZ: La política monetaria en España: objetivos e instrumentos (1977)*.
11 ANTONI ESPASA: Estimación y selección de modelos econométricos dinámicos (1978).
12 JESÚS ALBARRACÍN GÓMEZ: La función de inversión bajo una tecnología Putty-Clay: un intento de estimación para la economía española (1978).
13 JULIO RODRÍGUEZ LÓPEZ: Una estimación de la función de inversión en viviendas en España (1978).
14 JOSÉ MARÍA BONILLA: Funciones de importación y exportación en la economía española (1978).
15 ANTONI ESPASA: El paro registrado no agrícola, 1964-1976: un ejercicio de análisis estadístico univariante de series económicas (1978).
16 MIGUEL ÁNGEL ARNEDO ORBAÑANOS: Formulación de un índice de posición efectiva de la peseta mediante medias geométricas (1978).
17 ADOLFO SÁNCHEZ REAL: La financiación del sector eléctrico. La utilización del mercado de valores (1979).
18 ANTONI ESPASA: La predicción económica (1980).
19 AGUSTÍN MARAVALL: Desestacionalización y política monetaria. La serie de depósitos del sistema bancario (1981).
20 PEDRO MARTÍNEZ MÉNDEZ: El control monetario a través de la base monetaria: la experiencia española (1981).
21 AGUSTÍN MARAVALL: Errores de medición del crecimiento a corto plazo de series monetarias desestacionalizadas: una fundamentación estadística de las bandas de tolerancia (1981).
22 RICARDO SANZ: Métodos de desagregación temporal de series económicas (1982). (Publicada una versión inglesa en Documento de Trabajo núm. 8313.)
23 PEDRO MARTÍNEZ MÉNDEZ: El proceso de ajuste de la economía española: 1973-1980 (1982)*.
24 RAFAEL ÁLVAREZ BLANCO: El sector público en España: clasificación, fuentes y cuentas (1982)*.
25 AGUSTÍN MARAVALL: Detección de no-linealidad y predicción por medio de procesos estocásticos bilineales con una aplicación al control monetario en España (1982).
26 JESÚS ALBARRACÍN GÓMEZ: Las tendencias básicas de la población, el empleo y el paro en el período 1964 a 1980 (1982).
27 JUAN JOSÉ DOLADO: Procedimentos de búsqueda de especificación dinámica: el caso de la demanda de M_3 en España (1982).
28 JIMENA GARCÍA-PARDO: La demanda de fuel-oil en España (1982).
29 GONZALO GIL: Sistema financiero español (4.ª edición actualizada, 1986) (vol. extra). (Publicada una versión inglesa bajo el título Spanish Financial System.)
30 CLAIRE CRAIK: La formación de los precios alimenticios: 1968-1981 (1983).
31 JOSÉ LUIS MALO DE MOLINA: Las series desagregadas de salarios (1983).
32 ANTONI ESPASA: Un estudio econométrico de la tasa de variación del empleo de la economía española (1983).
33 JOSÉ VIÑALS: Los shocks de oferta y el proceso de ajuste macroeconómico (1983).
34 JOSÉ LUIS MALO DE MOLINA: ¿Rigidez o flexibilidad del mercado de trabajo? La experiencia española durante la crisis (1983).
35 JOAQUINA PARICIO TORREGROSA: La dinámica salarial en el período 1963-1976. Un análisis desagregado (1984).
36 IGNACIO MAULEÓN: La demanda de activos de caja del sistema bancario en el período 1978-1982: un estudio empírico (1984).
37 GONZALO GIL: Aspectos financieros y monetarios de la integración española en la Comunidad Económica Europea (vol. extra) (1985).
38 FERNANDO GUTIÉRREZ Y EDUARDO FERNÁNDEZ: La empresa española y su financiación (1963-1982). (Análisis elaborado a partir de una muestra de 21 empresas cotizadas en Bolsa) (1985).
39 PEDRO MARTÍNEZ MÉNDEZ: Los gastos financieros y los resultados empresariales en condiciones de inflación (1986).

1. El Banco de España, al publicar, en esta serie, documentos internos elaborados en su Servicio de Estudios, pretende facilitar la difusión de estudios de interés que contribuyan al mejor conocimiento de la economía española. El Banco de España no hace suyas, sin embargo, necesariamente, las opiniones expresadas en dichos trabajos cuando aparezcan publicados con la firma de su autor. * Las publicaciones señaladas con asterisco se encuentran agotadas.

40 IGNACIO MAULEÓN, JOSÉ PÉREZ FERNÁNDEZ Y BEATRIZ SANZ: Los activos de caja y la oferta de dinero (1986).
41 MARÍA DOLORES GRANDAL MARTÍN: Mecanismos de formación de expectativas en mercados con retardo fijo de oferta: el mercado de la patata en España (1986).
42 J. RUIZ-CASTILLO: La medición de la pobreza y de la desigualdad en España, 1980-1981 (1987).
43 I. ARGIMÓN MAZA Y J. MARÍN ARCAS: La progresividad de la imposición sobre la renta (1989).
44 ANTONIO ROSAS CERVANTES: El Sistema Nacional de Compensación Electrónica (Primera edición,1991. Segunda edición actualizada, 1995).
45 MARÍA TERESA SASTRE DE MIGUEL: La determinación de los tipos de interés activos y pasivos de bancos y cajas de ahorro (1991).
46 JOSÉ MANUEL GONZÁLEZ-PÁRAMO: Imposición personal e incentivos fiscales al ahorro en España (1991).
47 PILAR ÁLVAREZ Y CRISTINA IGLESIAS-SARRIA: La banca extranjera en España en el período 1978-1990 (1992).
48 JUAN LUIS VEGA: El papel del crédito en el mecanismo de transmisión monetaria (1992).
49 CARLOS CHULIÁ: Mercado español de pagarés de empresa (1992).
50 MIGUEL PELLICER: Los mercados financieros organizados en España (1992).
51 ELOÍSA ORTEGA: La inversión extranjera directa en España (1986-1990) (1992).
52 ALBERTO CABRERO, JOSÉ LUIS ESCRIVÁ Y TERESA SASTRE: Ecuaciones de demanda para los nuevos agregados monetarios (1992). (Publicada una edición en inglés con el mismo número.)
53 ÁNGEL LUIS GÓMEZ JIMÉNEZ Y JOSÉ MARÍA ROLDÁN ALEGRE: Análisis de la política fiscal en España con una perspectiva macroeconómica (1988-1994) (1995).
54 JUAN MARÍA PEÑALOSA: El papel de la posición financiera de los agentes económicos en la transmisión de la política monetaria (1996).
55 ISABEL ARGIMÓN MAZA: El comportamiento del ahorro y su composición: evidencia empírica para algunos países de la Unión Europea (1996).
56 JUAN AYUSO HUERTAS: Riesgo cambiario y riesgo de tipo de interés bajo regímenes alternativos de tipo de cambio (1996).
57 OLYMPIA BOVER, MANUEL ARELLANO Y SAMUEL BENTOLILA: Duración del desempleo, duración de las prestaciones y ciclo económico (1996). (Publicada una edición en inglés con el mismo número.)
58 JOSÉ MARÍN ARCAS: Efectos estabilizadores de la política fiscal. Tomos I y II (1997). (Publicada una edición en inglés con el mismo número.)
59 JOSÉ LUIS ESCRIVÁ, IGNACIO FUENTES, FERNANDO GUTIÉRREZ Y M.ª TERESA SASTRE: El sistema bancario español ante la Unión Monetaria Europea (1997).
60 ANA BUISÁN Y ESTHER GORDO: El sector exterior en España (1997).
61 ÁNGEL ESTRADA, FRANCISCO DE CASTRO, IGNACIO HERNANDO Y JAVIER VALLÉS: La inversión en España (1997).
62 ENRIQUE ALBEROLA ILA: España en la Unión Monetaria. Una aproximación a sus costes y beneficios (1998).
63 GABRIEL QUIRÓS (COORDINADOR): Mercado español de deuda pública. Tomos I y II (1998).
64 FERNANDO C. BALLABRIGA, LUIS JULIÁN ÁLVAREZ GONZÁLEZ Y JAVIER JAREÑO MORAGO: Un modelo macroeconométrico BVAR para la economía española: metodología y resultados (1998). (Publicada una edición en inglés con el mismo número.)
65 ÁNGEL ESTRADA Y ANA BUISÁN: El gasto de las familias en España (1999).
66 ROBERTO BLANCO ESCOLAR: El mercado español de renta variable. Análisis de la liquidez e influencia del mercado de derivados (1999).
67 JUAN AYUSO, IGNACIO FUENTES, JUAN PEÑALOSA Y FERNANDO RESTOY: El mercado monetario español en la Unión Monetaria (1999).
68 ISABEL ARGIMÓN, ÁNGEL LUIS GÓMEZ, PABLO HERNÁNDEZ DE COS Y FRANCISCO MARTÍ: El sector de las Administraciones Públicas en España (1999).
69 JAVIER ANDRÉS, IGNACIO HERNANDO Y J. DAVID LÓPEZ-SALIDO: Assessing the benefits of price stability: The international experience (2000).
70 OLYMPIA BOVER Y MARIO IZQUIERDO: Ajustes de calidad en los precios: métodos hedónicos y consecuencias para la Contabilidad Nacional (2001). (Publicada una edición en inglés con el mismo número.)
71 MARIO IZQUIERDO Y M.ª DE LOS LLANOS MATEA: Una aproximación a los sesgos de medición de las variables macroeconómicas españolas derivados de los cambios en la calidad de los productos (2001). (Publicada una edición en inglés con el mismo número.)
72 MARIO IZQUIERDO, OMAR LICANDRO Y ALBERTO MAYDEU: Mejoras de calidad e índices de precios del automóvil en España (2001). (Publicada una versión inglesa con el mismo número.)
73 OLYMPIA BOVER Y PILAR VELILLA: Precios hedónicos de la vivienda sin características: el caso de las promociones de viviendas nuevas. (Publicada una versión inglesa con el mismo número.)
74 MARIO IZQUIERDO Y M.ª DE LOS LLANOS MATEA: Precios hedónicos para ordenadores personales en España durante la década de los años noventa (2001). (Publicada una edición en inglés con el mismo número.)
75 PABLO HERNÁNDEZ DE COS: Empresa pública, privatización y eficiencia (2004).
76 FRANCISCO DE CASTRO FERNÁNDEZ: Una evaluación macroeconométrica de la política fiscal en España (2005).
77 JUAN S. MORA-SANGUINETTI: The effect of institutions on European housing markets: An economic analysis (2010).
78 PABLO MORENO: The Metamorphosis of the IMF (2009-2011) (2013).

BANCO DE ESPAÑA Eurosistema	Unidad de Servicios Auxiliares Alcalá, 48 - 28014 Madrid Teléfono +34 91 338 6368 Correo electrónico: publicaciones@bde.es www.bde.es